Kentucky Department of Education

TECHNICAL ASSISTANCE MANUAL ON AUTISM FOR KENTUCKY SCHOOLS

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Wilmer S. Cody Commissioner

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For More Information on Autism Contact:

Kentucky Department of Education; Division of Exceptional Children Services; Frankfort, Kentucky 40601; 502-564-4970

or Kentucky Autism Training Center; Child Evaluation Center University of Louisville 502-852-4631

Introduction

Congratulations! You have taken the first step toward meeting the educational needs of students with autism. You have put yourself on an exciting pathway of personal and professional growth. This road will pose some challenges, increase your knowledge and understanding that all children are learners, allow you to apply your collaborative skills, and further enhance your skills as an educator of ***all*** children.

Teachers sometimes think, "I can't have this student, I have never been trained on autism", "I'm not a special education teacher, I don't know how to teach a student who has autism", or "I'm afraid I can't teach students with autism, I don't know what to expect." These are common concerns that need to be acknowledged. These worries are understandable because what most people know about autism comes from knowing one individual with autism or from the media. Unfortunately, the media often perpetuate myths and stereotypes about individuals with autism and knowing one individual with autism does not provide a complete picture of the broad spectrum of characteristics (strengths and weaknesses) a student with autism might possess. Students with autism are as diverse as typical students. Student diversity in our schools has never been as great as it is now. We hope that this manual is only the beginning of your journey to becoming informed and educated about serving another diverse group - students with autism.

Parents of children with autism want teachers who understand their child from the child's perspective, and who apply positive, carefully planned teaching strategies based on this understanding to help their child learn and succeed. It takes more than good teaching to understand a student with autism. Good teaching combined with accurate knowledge about the disability builds the foundation for meeting the educational needs of students with autism.

Purpose

The purpose of this manual is to provide information and knowledge necessary to appropriately serve students with autism. To accomplish this purpose the manual:

1. provides answers to frequently asked questions about autism in Kentucky,

2. describes a framework for understanding autism through a competency model, and
3. applies the competency model to the development of individual educational programs(IEPs) and behavior management/discipline plans.

The manual is written in question and answer format using the most commonly asked questions about autism. Each question is listed in the Table of Contents and answered within the manual. In addition to the questions and answers several appendixes are provided to help you evaluate, plan, and implement appropriate instructional experiences for students with autism.

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Section One Understanding Autism

What is Autism?

Autism is a neurologically based syndrome described by a combination of behavioral characteristics. Autism can co-exist with other conditions. The most common condition co-existing with autism is mental retardation. Other co-existing conditions include fragile-X syndrome, neurofibromatosis, tuberous sclerosis, cerebral palsy, seizure disorders, blindness, deafness, and other syndromes such as Down, deLange, or Tourette's. A number of research studies indicate that about 70% to 80% of children with autism also have mental retardation, about 50% are nonverbal or minimally verbal, and about 25% to 30% develop seizures by adulthood.

Current literature documents a number of issues surrounding autism. Autism can be a difficult and confusing disability to identify due to the numerous classification schemes (Volkmar & Cohen, 1988). The clinical picture of autism varies across individuals, especially in the preschool

years, to the extent that there is often a lack of understanding or misdiagnosis of the disability. Individuals who manifest the <u>classic</u> symptoms of autism are more likely to be diagnosed than those who exhibit less apparent symptoms (Allen, 1991). Parents of children with less serious deficits are often told that their child is autistic-like, obsessive-compulsive, schizophrenic, oppositionally-defiant, communication disabled, emotionally disabled, learning disabled, or has a pervasive developmental disorder. Diagnosticians who lack experience with a large number of cases of autism may miss the elusive features of autism (Frith, 1989).

To determine if a student is eligible for special education and related services, information is collected across eight domains: cognitive functioning; physical functioning, communication functioning, social competence, educational functioning, environmental influence, vocational functioning, and recreation and leisure functioning. A brief description of each domain follows.

Domains Assessed for Determining Eligibility for Special Education and Related Services

- **Cognitive Functioning** - includes intelligence and thinking processes (e.g., knowledge, comprehension, application, analysis, synthesis, and evaluation).
- **Physical Functioning** - includes vision, hearing, speech mechanism, health and motor/psychomotor (e.g., gross motor, fine motor, locomotion).
- **Communication Functioning** - includes expressive (what is spoken/signed), receptive (what is heard/interpreted), nonverbal communication, articulation, mode of communication, voice and fluency.
- **Social Competence** - includes social psychological development, interpersonal behavior, personality, and adaptive behavior (personal living skills, community living skills, communication and social skills).
- **Educational Functioning** - includes basic skills and achievement in content areas and school/study skills.
- **Environmental Influence** - includes home, educational experience, cultural and economic influences, and interactions in the home, school and community.
- **Vocational Functioning** - includes general work behaviors, dexterity, following directions, working independently or with job support, socialization skills, job interests/preferences, career awareness, job interview and application skills, and job specific work skills.
- **Recreation and Leisure skills** - includes use of free time, personal hobbies, use of community recreation resources, physical fitness, and degree of social involvement.

Autism has been described as a spectrum disorder because its characterization in these domains ranges from people who have severe deficits to those who have mild deficits. Figure 1 provides a graphic representation of the some of the domains and possible ranges of functioning of students with autism.

FIGURE 1

Domain and Potential Range of Functioning for Students with Autism

Cognition		
Severe		Gifted

Academic Skills		
Low		High
Social Interaction		
Aloof	Passive	Active but Unusual
Communication		
Nonverbal		Verbal
Physical Functioning: Motor Skills		
	**Gross Motor**	
Awkward		Agile
	**Fine Motor**	
Uncoordinated		Coordinated
Physical Functioning: Sensory		
Hyposensitive		Hypersensitive

Many classification systems have been used to diagnose a person with autism. To classify students as eligible for special education and related services, most states use diagnostic criteria from one, or a combination, of three sources: (a) the Diagnostic and Statistical Manual for Mental Disorders - 4th Edition (DSM-IV), (b) the Individuals with Disabilities Education Act (IDEA) P. L. 101-476, or (c) state laws and requirements (e.g., Kentucky Administrative Regulations). The criteria for autism found in these three sources follow.

DSM-IV Criteria for Autistic Disorder - as found in the Pervasive Developmental Disorders Category

A student is considered to have autism if he/she meets the following:

A. A total of six (or more) items from #1, #2, and #3, with at least two items from #1, and one each from #2 and #3:

1. Qualitative impairment in social interaction, as manifested by at least two of the following:

(a) marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction;
(b) failure to develop peer relationships appropriate to developmental level; and/or
(c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest).

2. Qualitative impairments in communication as manifested by at least one of the following:

> **(a**) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime);
> **(b)** in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others;
> **(c)** stereotyped and repetitive use of language or idiosyncratic language; or
> **(d)** lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.

3. Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:

> **(a)** encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus;
> **(b)** apparently inflexible adherence to specific, nonfunctional routines or rituals;
> **(c)** stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements); or
> **(d)** persistent preoccupation with parts of objects.

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:

> 1. social interaction;
> 2. language as used in social communication; or
> 3. symbolic or imaginative play.

C. The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder.

Individuals with Disabilities Education Act Criteria for Autism

CRF 300.7(b)(1)

(1) **"Autism"** means a developmental disability significantly affecting verbal and nonverbal communication and social interaction generally evident before age 3, that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.

Kentucky Administrative Regulations Criteria for Autism

KAR 707 1:200 Sec. 4.
Section 4. Autism

(1) The Admissions and Release Committee (ARC) shall determine that a child or youth has the disability of autism as defined in Kentucky Regulatory Statute (KRS) 157.200 and is eligible for specially designed instruction and related services if evaluation information collected across multiple settings verifies:

> (a) deficits in developing and using verbal or nonverbal communication systems
> for receptive or expressive language;
> (b) deficits in social interaction (participation) including social cues, emotion expression,
> personal relationships, and reciprocal (contributing) interaction;
> (c) repetitive ritualistic behavioral patterns including insistence on following routines and
> a persistent preoccupation and attachment to objects; and
> (d) abnormal responses to environmental stimuli.

(2) The ARC shall document that the deficits are not primarily the result of one of the following: impaired hearing, physical disability, emotional-behavioral disability, specific learning disability, mental disability, visual disability, deafness and blindness, or traumatic brain injury.

(3) The ARC shall document its interpretation of evaluation information showing that the disability adversely affects educational performance and the child is eligible for specially designed instruction and related services.

Figure 2 offers a graphic comparison of the three sources of criteria for determining if a student has autism in relationship to three areas (social interactions, communication and behavior skills) found within the three areas typically impacted by autism: social interaction, communication functioning, and behavior skills. There is little difference between the descriptions of deficit areas between the three sources.

FIGURE 2

Three Diagnostic Criteria and Three Typical Areas Affected by Autism

Source	Social Interaction	Communication Functioning	Behavior Skills
DSM-IV	qualitative impairment in social interaction	qualitative impairment in communication	restricted repetitive and stereotyped patterns of behavior, interests, and activities
IDEA	a developmental disability that significantly affects social interaction	developmental disability that significantly affects verbal and nonverbal communication	engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual response to sensory experiences
KAR	deficits in social interaction (participation)	deficits in developing and using verbal or nonverbal communication systems for receptive or expressive	repetitive ritualistic behavioral patterns including insistence

	including social cues, emotion expression, personal relationships, and reciprocal interaction	language	on following routines, persistent preoccupation and attachment to objects and abnormal response to environmental stimuli

The three classification systems focus on the classic symptoms of autism. There are also characteristics that are commonly present but are not necessary for a diagnosis of autism.

These characteristics include:

- delayed processing, delayed shifting of attention;
- uneven development within and across domains;
- hyperactivity (e.g., short attention span at first, but an emergence of the ability to develop intense interest in certain objects or activities);
- difficulty filtering out extraneous sensory stimuli and unusual sensitivity to noise, movement, visual stimuli, touch, taste, or smell;
- sensory problems often manifested early in life including tactile defensiveness, screening out or failing to screen out stimuli, reacting strongly to certain stimuli, or any combination of the four;
- motor apraxia common in preschool years with difficulty handling scissors, pencils, crayons, even though fine motor dexterity in manipulation of objects is good; and
- difficulty understanding the passage of time.

In Kentucky, determination of eligibility for special education and related services is made by an Admissions and Release Committee using the criteria set forth in the 707 KAR 1:200 Sec. 4 which reflects the requirements of Federal law. While not required, the use of the criteria set forth by the DSM-IV to distinguish the studentís characteristics can support other information discussed during the eligibility determination phase to determine if the student meets Kentuckyís eligibility requirements.

DO ALL STUDENTS WITH AUTISM SHARE THE SAME CHARACTERISTICS?

There are many myths that surround the disability of autism which are sometimes reinforced by characterizations such as in the movie *Rainman*. While this movie increased the awareness of autism and the effect autism may have on a family, its portrayal of an individual with autism was more stereotypical than representative. Two common myths that were reinforced by this movie were (a) that people with autism cannot show affection to others and (b) that people with autism have unusual abilities. Students with autism are a diverse group with varying degrees of ability, social interest, and communication. Students with autism share a core set of features that sets them apart from other students with disabilities who have social, communication, or behavior problems.

A student without disabilities would be expected to perform similarly across the various domains. The age equivalent scores would be about the same as the student's chronological age. In this example, a student 17 years and 2 months old would be expected to obtain similar age scores across the assessment domains, as noted by the dotted line.

For students with autism, disparities are often noted in the difference between chronological (actual) age and age equivalent scores from performance measurements. Differences across the five domains are typical. In Figure 3, the students with autism were all 17 years and 2 months old at the time of assessment. Student E has relatively high cognitive performance indicated by his obtained IQ score which was above the expected age equivalent score of 17 years. Student A, however, performed below his expected age equivalent of 17 years in the cognitive domain. Student A is identified as having both autism and mental retardation, while Student E has autism without mental retardation. For both Student E and A, relative weaknesses were noted in communication and social domains.

Students with autism may also have other disorders such as seizure disorders (20% - 30% of individuals with autism develop seizure disorders by age 18 according to Gillberg and Steffenburg (1987)) and affective (psychological) disorders, particularly depression. Students with autism will also have other personality factors similar to students without disabilities. A student with autism might be quiet, shy, boisterous, action oriented, impulsive, reflective, or any other characteristics that people have. Paired with the challenges presented by autism, these factors can become additional challenges and risks.

Overall, people with autism can have strengths in daily living skills, motor skills, and sometimes, cognitive performance. Lower performance in social competence and communication functioning are characteristic of autism and noted across all individuals, regardless of their performance in other domains. However, the strength of an individual with autism in academic and cognitive skills varies with each individual ranging from very high functioning to low functioning mastery of skills.

WHAT CAUSES AUTISM?

Autism was first described in the research literature in 1943 by Leo Kanner. There are multiple suspected causes of autism. Autism has been found in children whose mothers contracted rubella or cytomegalovirus during pregnancy. Severe infections during very early infancy have been associated with autism. Some environmental factors are also believed to contribute to autism. There is also a form of autism that seems to follow a double recessive gene. Autism occurs about four times more often in males than in females. There is **no relationship between autism and social economic status, race, ethnic or geographic origin**. In addition, autism **is not due to psychological factors or parenting style**. It is both a delay in development and a process of atypical development. Autism is a distinct disorder that is meaningfully different from emotional disabilities, behavioral disabilities, mild mental disabilities, schizophrenia, and specific developmental language disorders (Minshew, 1992; Rutter & Schopler, 1992).

Medical studies have implicated a neurological basis for the disorder. Numerous abnormalities have been identified in individuals with autism. Some believe that these abnormalities can result in problems of attention, memory, information transfer, and complex information processing (Minshew & Rattan, 1992).

HOW MANY PEOPLE HAVE AUTISM? WHAT IS THEIR EDUCATIONAL HISTORY?

Although the incidence level for autism ranges from 5 to 20 of 10,000 births depending on the criteria used, it is estimated that at least 1 out of 1,000 individuals has autism. Autism is the third

most prevalent developmental disability in America, not nearly as rare as one might think (Autism Society of America, 1994).

Twenty-five to 30 years ago, 90% of those identified with autism lived in institutions and were educated in segregated school buildings or segregated classes. Now the opposite is true. Almost all students with autism live in their communities and attend public schools. When unique needs are understood and individualized supports are put in place to specifically teach skills that most peers learn from experience, correction, or study students with autism benefit from learning with peers.

WHO SHOULD BE INVOLVED IN THE EDUCATION PROGRAM OF A STUDENT WITH AUTISM?

The number of people and roles of individuals who work with a student having autism vary from one student to the next because the needs of each individual student are different. As the student grows and changes throughout the educational and post secondary years the people responsible for supporting will likely fluctuate.

Families are faced with a lifetime of helping their child grow and develop into a competent citizen. Family members are often the interpreters and strongest advocates for their child. Therefore, families benefit from having a network of people who can support and advocate for them when necessary. Parents need to know there are other people trying to help their child become a capable citizen.

Federal and State requirements clearly outline the membership of a decision making multidisciplinary team for a student who has a disability. This multidisciplinary team, called the **Admissions and Release Committee** (ARC), consists of a wide range of individuals who have direct and indirect contact with the student and family. There can be an unlimited number of individuals involved in an ARC ranging from the regular education teacher to a social worker.

Any individual who has information that is educationally relevant to the student may become a member of the ARC or provide critical information without becoming a member. However, the Kentucky Administrative Regulations (707 KAR 1:180 Sec. 4), which reflect federal law, require that the ARC membership consists of at least the following:

- parent;
- child, when appropriate;
- regular education teacher of the child;
- teacher of exceptional children who is knowledgeable of the
- disability or suspected disability;
- administrator or designee; and
- others as requested by members of the ARC.

Most students with autism receive services and instruction from a variety of people in a variety of educational settings. To be successful, students with autism need a multidisciplinary team working collaboratively to meet their unique needs. Such a team will assess, brainstorm, problem solve, and create ideas together to provide needed services. A list of potential members of the ARC and multidisciplinary team is offered in Figure 4. This list is by no means exhaustive or final.

FIGURE 4 **Possible ARC and Multidisciplinary Team Members**

Within the school	
Home/Community	
Student with autism	Family
members	
Regular education teacher(s)	
Psychologist	
Special education teacher(s)	
Physician	
Physical therapist	Nurse
Practitioner	
Speech language pathologist	Friends
School administrator	
Advocates	
Occupational therapist	Agency
personnel	
Social worker or Counselor	Autism
"experts"	
Friends from studentís class(es)	
Community members	
School Psychologist/Evaluator	

Each member of the ARC and multidisciplinary team provides unique expertise and supports to the educational services of the student with autism. The following information is a summary of the typical role(s) individual members of an ARC or multidisciplinary team may take when serving a student with autism.

Roles of ARC and Multidisciplinary Team Members

The **Student with Autism** participates in the decision and choice-making whenever feasible.

Family Members are vital members of the team. Usually parents, sometimes grandparents, aunts and uncles, brothers and sisters are the most intimately involved with the student with autism throughout life. They are friends, advocates, models, and teachers. They provide a view of the studentís needs from the longitudinal perspective.

Regular Education Teachers who teach the student provide information from observations, interactions, and informal and formal evaluation. It is vital to know the expectations of teachers, their ability to individualize, and the support they require to assure student success.

A Psychologist/School Psychologist assesses the student through formal and informal means and suggests individualized strategies for teaching and for helping the student learn the skills needed to engage in appropriate behavior.

Special Education Teachers provide input and expertise in assessment or evaluation, the development of particular objectives; the design and implementation of individualized strategies; and modifications or accommodations to techniques, materials or teaching methodology. The special education teacher provides direct (e.g., teaching) or indirect (e.g., materials, consultations) services to students and teachers.

A Physician or Nurse Practitioner shares the medical history and current concerns. For example, they can explain medical conditions, effects of medication, and assist with the monitoring and administration of medication.

Occupational Therapists and Physical Therapists provide direct therapy to the student and/or indirect therapy (consultation) to parents and teachers. Assessment, input into objectives, and evaluation are important roles for these therapists.

A Building Administrator commits personnel and fiscal resources to support the special education and related services.

A Speech/Language Pathologist provides continual assessment related to the communication needs of the student. The pathologist assists and supports communication methods and techniques, provides direct therapy, indirect services (e.g., consultation), and training for educators and parents.

A Social Worker or Counselor provides individual or small group instruction on identified objectives such as social interaction skills, learning what to do when frustrated, or desensitization to fears. In addition, these individuals provide support and information to families, peers, and staff.

Friends, Advocates, and Other Community Members offer a unique perspective. Individuals from the community provide realistic perspectives on how the student with autism can be a productive member of the community. Friends and advocates provide realistic perspectives about how the student can be a productive member of a family, a close group of friends, and the community.

Agency (Non-School District) Personnel working with the Student and/or Family (e.g., social services) provide support, ensure smooth transition (e.g., job coach), allow for consistency, and ensure success during transition.

Autism "experts" provide insights and current research information to ensure that best practices are being planned and implemented.

Friends of the student in her/his class provide their perspective of the studentís abilities and capabilities .

IS THERE A DIFFERENCE BETWEEN AN ADMISSIONS AND RELEASE COMMITTEE AND A MULTIDISCIPLINARY TEAM?

The difference between an Admissions and Release Committee (ARC) and a multidisciplinary team is often misunderstood. State regulations require that the membership of the ARC is multidisciplinary - thus making it a multidisciplinary *group* of individuals specified by regulation

who *work together* to make educational decisions for the student with disabilities and to ensure the educational success of the student. A multidisciplinary team is a group of individuals specified by an ARC through the Individual Education Program (IEP) who work together to serve a student with disabilities.

The confusion over an ARC and multidisciplinary team seems to grow out of the **purpose** each team serves. The Admissions and Release Committee is responsible for making specific decisions related to the student, including evaluation issues, development of an IEP, and determining placement in the least restrictive environment. Multidisciplinary teams are responsible for implementing the ARC decisions. For example, a multidisciplinary team gathers evaluation data to address issues raised by the ARC. A multidisciplinary team also may do instructional planning and provide services specified on the IEP. In some cases, multidisciplinary teams plan, implement, and evaluate the day to day instructional strategies which support the student in meeting IEP goals and objectives.

The ARC must meet at least once each calendar year (365 days) to review the studentís IEP, evaluate ongoing progress, develop new strategies, and as needed, revise the IEP. The discussion of ideas and reasons for decisions are documented on an ARC Conference Summary Report. The ARC may meet as often as needed throughout the year to discuss concerns about the IEP and make decisions based upon educationally relevant information. Ideally, each member is present for each ARC meeting. Sometimes it is difficult for every member to meet at the same time for an ARC meeting. When this happens, prior to the ARC meeting the members who will attend the ARC have the responsibility to gather pertinent information from others who do not attend the meeting. Their information is presented at the ARC meeting.

The multidisciplinary team plans, implements, and evaluates the day to day instructional strategies which support the student in meeting IEP goals and objectives. This team can, and should, meet on a regular basis, (such as weekly instructional planning during a teacherís planning period) to design instruction and make modifications to meet the needs of the student. Such meetings allow the multidisciplinary team to plan for weekly concerns about the studentís continuing progress. Such planning meetings are not considered to be formal ARC meetings so they are not documented on Conference Summary Reports. Meetings such as this may take the form of planning, informal conversations, telephone conversations, teleconferencing, email, shadowing, or written communications. Decisions from these meetings are documented via informal means (e.g., lesson plans, data charts, communication books). It is important that the results of such meetings be shared with the ARC.

These planning meetings and the communication system for the team serving a student with autism are considered vital to the implementation of the annual goals and objectives on the studentís IEP. The day to day instructional decisions are considered essential for student progress. The *results* of those decisions (meaning the progress that the student makes each week) are presented and discussed during ARC meetings and documented as *ongoing progress data.*

Each person involved in the life of the student with autism plays a critical part in the studentís success. To guarantee student success, State regulations require that an Admissions and Release Committee is formed so that there is adequate representation of the studentís needs from a variety of perspectives. Regulations specify membership of the ARC. The multidisciplinary team is flexible based upon services needed at a specific time and may include individuals who also serve as ARC members.

As part of the ARC process the team collects and examines current ongoing progress data concerning the studentís progress on specific goals. This allows the ARC to conduct long term planning for the student. Multidisciplinary team members use the long term planning as a guide for developing the short term, or day to day instructional strategies, that will support the student. It

is possible that there will be individuals (e.g., consultants) who become a temporary member of the multidisciplinary team to develop day-to-day strategies. For example, a private consultant on behavior management for students with autism might come in to the school and home to work with the team on developing positive behavior management plans. The consultant may work with the team for only a few hours or a day. The consultant may temporarily become part of the multidisciplinary team, but might not attend the ARC meeting because the parents and educators feel they can adequately represent the information gained through the consultation. Figure 5 offers a graphic representation of the differences between the functions of an ARC and a multidisciplinary team.

FIGURE 5 **Functions of the Admissions and Release Committee and Multidisciplinary Team**

<u>ARC</u>	<u>Multidisciplinary</u> Team

Collaborate on long term planning (IEP).
term planning
(instructional and daily lesson plans).

Collaborate on short

Assure due process is followed.
the student.

Provide services to

Meet at least every 365 days to
to determine educational needs
based upon State and Federal law.

Meet daily or weekly
plan strategies to support
the student.

Provide data related to student's
to student'seducation progress.
progress

Provide data related

Document information and decisions and
in IEPs and Conference Summary
plans or other Reports.

Document information
decisions in lesson
formats.

Create the IEP goals and based on
objectives.

Plan instruction
IEP goals and objectives.

Communicate to all individuals.
individuals.

Communicate to all

Analyze evaluation data using informal evaluation
and formal evaluations to make long

Collect and analyze
data using informal and formal

methods range educational decisions   for instructional
decisions.

Section Two: Understanding Autism Through a Competency Model

To effectively teach a student with autism it is necessary to understand how the qualitative impairments associated with the disorder affect each student. Because of the neurological nature of autism, there are a number of behaviors that the student cannot change without specific supports. These supports are similar to wheelchairs for students who are paraplegics, hearing aides for students who are partially deaf, or eye glasses for students who have vision problems. While students who use wheel chairs or eye glasses have physical or visible needs, the student with autism may not have problems that are obvious from a visual perspective. When working with a student who has autism, the multidisciplinary team has to understand and interpret the cognitive (mental) processing problems that affect the way the student translates what is seen, heard, and felt into functional, useful information and behavior.

The task of learning creates major stresses and anxieties for a student when the personal challenges of autism are combined with the environmental challenges. The personal challenges for a student with autism are core deficits which impact the eight domains described previously in Section One (pp. 5-6). These **core deficits** are most often found in four domains: Cognitive functioning, Social interaction, Communication functioning, and Physical functioning (particularly in motor and sensory skills). Identifying the studentís strengths and weaknesses within these domains with precision and accuracy is the first step to designing and implementing successful educational experiences for the student.

IS THERE A MODEL THAT COULD HELP THE ADMISSIONS AND RELEASE COMMITTEE AND MULTIDISCIPLINARY TEAM DESIGN AND IMPLEMENT AN IEP FOR A STUDNET WITH AUTISM?

To successfully design education experiences for students with autism the Admissions and Release Committee (ARC) must understand the strengths and weaknesses of the individual student as well as what resources (materials, strategies, and people) are necessary to support the student. The link between the challenges of autism and appropriate educational supports is conceptualized using the **Autism Competency Model** developed by Ruble and Dalrymple (1995). The role of educators and family is to understand how to apply the Autism Competency Model so that every student with autism has the environmental resources needed to succeed.

The Autism Competency Model is based upon the concept that the education program for a student with autism describes what the student needs to work on to achieve the outcome of functioning as a competent person in society. It is important for the ARC to recognize that being competent does not require the person to be completely independent, but does require the person to be a contributing member of a community. The ARC must also recognize that students with autism will be successful to different degrees with jobs, leisure activities, and daily living

skills in the community and that the context of his or her community will likely consist of family members, close friends and others.

Being considered competent requires the ability to interact successfully with other people and to succeed in activities that are valued in the community. Therefore, when developing the IEP the ARC should identify what students who are not disabled and are the same age and grade level are mastering. Once these are known, the team can prioritize the skills for the student with autism and then determine which will require individualized supports so the student can be successful based upon the studentís current skill level.

The Autism Competency Model suggests that there are two major factors that influence student success: **Risk Factors and Protective Factors**. *Risk Factors* are those factors within the student (Personal Challenges) and within the environment (Environmental Challenges) that pose great obstacles for a student. *Protective Factors* are those factors within the student (Personal Resources) and the environment (Environmental Resources) that underlined counterbalance the risk factors and assist the student in overcoming challenges to be successful. Protective factors are the resources, both personal and environmental that allow the student to be successful. Figure 6 offers a visual representation of the Autism Competency Model.

FIGURE 6

Autism Competency Model

Protective Factors   **Risk Factors**

Personal Resources		Personal Challenges
Environmental Resources		Environmental Challenges

Protective factors, on the left side of the scale, are the accumulation of both personal and environmental resources which allow the student to be successful. Protective factors include the personal resources, (strengths) a student with autism brings to the educational experience and the environmental resources (materials, strategies, people) which are provided for the student to ensure success with the educational experience. **Risk factors**, on the right side of the scale, are the personal and environmental challenges that could prevent the student from being successful in typical educational experiences. Risk factors include both the personal challenges (areas of weakness) and environmental challenges (materials, strategies, people) which interfere with the student's ability to be successful.

The student with autism can be competent when the protective factors counterbalance the risk factors. To know what and how to teach a student, it is important to understand the protective and risk factors and how these affect the learning of a student with autism. Using the Autism Competency Model as the format for understanding how to design appropriate educational opportunities for a student with autism the ARC should begin by exploring the risk factors facing the student. Once the risk factors have been identified, the ARC explores the protective factors available and appropriate for the student. Understanding the tentative balance between an individual's resources and challenges helps educators know what and how to teach a student with autism. The balance is tentative. In different situations or at different times the challenges become more significant, or the studentís response to the challenge is inconsistent or regressive.

Understanding Risk Factors

Risk Factors fall into two categories. The first category, **personal** (within-person) **challenges**, is comprised of characteristics that affect a student's ability to learn and achieve educational success. Figure 7 highlights the personal challenges quadrant of the scale.

FIGURE 7

Autism Competency Model

Protective Factors   **Risk Factors**

| Personal Resources |

| Personal Challenges |

Environmental Resources

Environmental Challenges

The second category is **environmental challenges**, that also contribute to the student being at risk for educational failure. This section of the manual addresses the risk factors facing students with autism. Personal challenges will be addressed first, then environmental challenges will be explained. ## Personal Challenges

Personal challenges that must be addressed so the student can develop competence are the within-person factors that result from having autism. Minshew and Rattan (1992) suggest these challenges include:

- deficits in normally comprehending social interactions, language, and the meaning of information or events;
- deficits are always concurrent and generally proportionate;
- developmental progress in the three areas appears linked;
- deficits are first and most severely manifested between birth and 5 years of life with a wide divergence in function thereafter; and
- the signs and symptoms of this disorder are lifelong and are revealed in a manner characteristic of the age and IQ or developmental level of the individual. (p. 406)

Personal challenges that in combination are unique to the disability of autism include impairments in

- social competency, particularly social interaction and patterns of behavior, interests, and activities,
- communication functioning, particularly receptive and expressive language,
- cognitive functioning, particularly perspective taking, imaginative activities, and
- physical functioning, particularly motor skills and sensory skills.

Each of these personal challenge areas are discussed in the following section.

Domain: Social Competency

Area: Social Interactions

Neither the quantity of interactions nor the desire for social interaction define the social impairment in autism (Minshew & Rattan, 1992). The social impairment may be confusing to teachers because often they may observe the student interacting with peers at recess or in the classroom. However, it is the quality of the interactions that must be examined. Students with autism have difficulties learning social interaction in an unstructured fashion, initiating social behavior without supports, and sustaining social interactions in a reciprocal manner (Lord, 1984; Smith, 1990; Walters, Barrett, & Feinstein, 1990).

Social Impairments common across students with autism include:

1. Perceiving and predicting the reactions of others

- joint perspective taking with others, including joint attention
- understanding social conventions

2. Understanding the meaning of social cues and overtures

- turn-taking and sharing
- learning by interpreting others reactions to self and/or other's behavior
- being aware and knowing what to do when partner signals end or desire for change
- interpreting social events
- reacting to invitations
- reading nonverbal behavior of others

3. Producing appropriate social responses

- playing around a common theme
- expanding conversation, behavior, or actions of partner
- repairing breakdowns in interactions
- negotiating and resolving conflicts
- initiating interaction
- joining the play or activity of others

4. Understanding that other people have views of the world that are different from one's own, as well as predicting what these views are and how these views affect another's behavior.

In educational environments students are expected to attend to a multitude of social cues and to interpret and respond to these cues in a manner that is appropriate to the social context. However, students with autism have difficulty developing skills needed to differentiate and classify emotions, communicate accurately and competently with another person, take the perspective of another individual, and consider their own and others' view points (Howlin, 1986).

It is important for students with autism to develop social interaction skills. How well the student with autism participates in the community as an adult is related to social skills and positive peer friendships. Community inclusion and community-based jobs are often restricted or eliminated for individuals with autism due to difficult social behaviors and interactions. Wing and Gould (1979)

state that in adolescence and adulthood, individuals with autism who are aware of their difficulties and failures are at risk for depression, anxiety, psychotic breaks from severe stress, and even incarceration. Hartup (1983) confirms that the adequacy of social peer relationships in childhood is a strong predictor of mental health status in adulthood. The gap between social interest and social competency needs to be addressed as part of the school curriculum.

Implications of Social Impairments

Impairments in social competencies lead to difficulty understanding what other people are thinking, understanding another's point of view, and most importantly, knowing how to modify and regulate one's own behavior based on what other people know and expect. This cognitive skill allows people to predict the behavior of others by interpreting their emotions and thoughts. Recent research on the social impairments suggests the impairments are thought to be the result of a specific problem in perspective-taking. The ability to consider other people's viewpoints is lacking in most children and adults with autism. The description which follows illustrates the concept.

Researchers, Baron-Cohen, Leslie and Frith conducted a formative study in 1985 investigating social impairment in children with autism. Using puppets, the investigators asked children with autism, children with Down Syndrome, and normally developing children to respond to questions that required them to take the perspective of another. The children observed a scene involving two puppets named Sally and Anne. Sally had a basket in front of her, and the experimenter placed a marble in the basket. Then Sally left, and the marble was moved to Anne's box during Sally's absence. When Sally returned, the experimenter asked the children, "Where will Sally look for her marble?" The children passed the test if they considered Sally's perspective by pointing to the marble's original placement (where Sally left it). If they pointed to its current spot (in Anne's box), they failed to take into account Sally's perspective (that Sally didn't know her marble was moved while she was gone).

About 85% of the children with Down Syndrome and 85% of the non-disabled children passed the test. In contrast, 20% of the children with autism passed. These results are even more striking when the characteristics of the children are considered. The average age of the children with autism was *7 years older* than the comparison children, and their average intelligence level was higher than that of the children with Down Syndrome.

Since this original study, several other researchers have replicated the finding that a majority of children with autism perform significantly worse than other groups on perspective-taking tasks. The poor performance of individuals with autism on perspective-taking tasks has led researchers to propose the existence of a specific cognitive deficit that is particular to autism and explains the observed social impairments.

A student with autism may appear selfish, egocentric, aloof, or rude because he or she does not understand that other people behave in ways that are based on their own feelings, emotions, and

knowledge, that is, that they have a different perspective. It is important that educators, parents and friends of the student with autism understand that the student often lacks information that other students learn incidentally (e.g., perspective taking). Understanding the fact that students have difficulty with perspective taking should dispel the notions that the student is in control or *chooses* such negative behavior.

Once it is understood that students with autism are missing critical information and that they often do not know that we have information different from their own, the educators can gain insight as to the studentís perspective and then consider how to give the student the information needed. Learning the perspective of the student with autism is a useful strategy which allows the multidisciplinary team to carefully consider and design the best instructional supports for the student. An example of this strategy follows.

> Keith is a 17 year old with autism who is considered "high functioning" because he does not have mental retardation. His teachers organized a group of peer buddies to take him out for pizza on Friday evenings. Soon his peer buddies were tired of taking him out and began to make excuses for not wanting to go. After asking the peers what happened, his teacher discovered that Keith always made the sole decision for what kind of toppings to get on the pizza. One of the peers didn't even like what was ordered. The teacher asked the students why they allowed him to do this. They said, "Because we don't want him getting upset in public." The teacher talked to Keith, and he said that he didn't know that they wanted something different. To get this information, each studentsí preference was written down. Once Keith had this information, he became aware that his peers had different ideas about pizza and he began asking them what they wanted.

For students with autism, many of the difficulties with perspective-taking are observed in social situations that require sharing, cooperating, and negotiating. Other perspective-taking situations such as explaining oneself, asking for input from others on how to solve a problem, and defending one's own actions are often difficult for the student with autism. The student is often misunderstood by teachers, parents, and peers because he/she does not share relevant information and does not recognize that the teacher or parent is lacking important information about events the student has experienced.

Area: Play/Imaginative Impairments

Typically students with autism have little interest in toys and often do not use toys in the intended way. They may line up toys, spin parts, or use them in a repetitive manner. Later, they learn to use toys as they have seen them used, but may focus on detail and parts of play. A student with autism has trouble adding creativity and flexibility to the play. Memory and focus on detail may appear to be imaginative activity. The studentís interest in video and TV sequences, TV game shows, video games, and letters and numbers reflects the need for sameness, predictability, and sequences.

Implications of Play/Imaginative Impairments

The difference in imaginative play, if not understood, could pose problems at home, school, work, and the community in relationship to the studentís ability to interact with peers, use materials, problem solve, and display acceptable behaviors in learning environments. For example, in a preschool class where the students are asked by the teacher to role play or demonstrate the

behaviors of their favorite animal, the student with autism may not be able to engage in the role playing (acting out), but might pick up a toy monkey and name the animal. While the example suggests that the student is participating in the activity, educators and peers, through understanding the difference in imaginative play could improve the studentís performance of the required task.

Area: Safety Skills

Another area of social competence that is of great importance for a student with autism is safety skills. It may be necessary to teach specific safety skills (e.g., staying in boundaries, safe use of materials, understanding about strangers, knowing about drugs and sexuality, and refraining from harming others) across multiple environments. Students with autism may not understand safety rules and may not transfer the rules from one situation to another unless they are concrete and specifically taught in multiple environments.

Implications of Deficits in Safety Skills

Deficits in safety skills can pose direct and indirect problems for the student with autism and for the others who work or play with the student. If a student fails to follow a rule which sustains personal safety to self or others the risk of injury increases. If the student does not follow safety rules which sustain socially acceptable behavior (e.g., keeping hands to self) the risk of negative interactions increases. For example, if the student does not follow the rule of "Keep your hands to yourself." and inappropriately touches other students it is likely that the student will receive a negative social response such as being ignored or avoided or punished.

It is important for educators, family, and peers to use consistent and concrete safety rules with the student who has autism across all environments and teach the student the rule using positive teaching strategies. By using consistent and concrete rules and teaching strategies the student will be better able to engage in appropriate social interactions and feel positively reinforced, thus building social competence.

Domain: Communication Functioning

Area: Expressive and Receptive Language

People with autism have impairments in both receptive (understanding what is heard) and expressive (communicating what is known) communication. Expressive communication impairments often appear in early childhood as delayed and disordered patterns of language, and in functional and social use of verbal and nonverbal language (Minshew & Rattan, 1992). Receptive communication impairments are exhibited by problems with comprehension. These **communication impairments** include:

1. Deviant sequence of language development. For example:

   - Delayed and difficult use of gestures
   - Use of echolalia, immediate, delayed and more complex with stereotypic language developing; usually a stage of pro nominal reversal
   - Delayed use of communicative eye contact
   - Begin use of language, then regress
   - Delayed development of language from the beginning

2. Prosodic problems in volume (too loud, soft, monotone), cadence (an unusual pattern of word emphasis, no emphasis), and pitch (too high, erratic, unvarying).

3. Deficits in the functional and social use of language that seem to reflect the deviant development of language comprehension and social cognition. For example:

- Problems generalizing meaning of words; understanding only in the context learned. (Young children have trouble with ìyesî and ìnoî or one phrase may be used to mean one concept, such as "Time to go home" being used any time the child wants to leave a place.)
- Deficits in verbal and non-verbal problem solving
- Odd or unusual use of eye contact and facial expression that doesn't enhance communication or signal an interest
- May not use language for communication or social purposes, yet may make requests or ask questions when no one is around
- Seldom comments, rarely volunteers information or asks "wh" questions for information, stereotypic repetitive comments and questions
- Has difficulty with initiation
- Lacks understanding of speech etiquette
  - talks about any topic anywhere with anyone
  - has trouble understanding beginning and ends of conversation
  - preoccupation with certain topics

4. Deficits in language comprehension often go unrecognized in the more verbal student with autism and are misunderstood in other students with autism. For example, students who read are often stronger in decoding skills than in comprehension. For example:

- Misunderstands or does not generalize word and phrase meanings
- Unable to follow pace of conversation and/or the back and forth nature of conversation
- Inability to understand or translate questions
- Problems with abstract concepts
- Literal interpretation of words and experiences
- Inability to perceive themes, thus sees stories and experiences as unrelated
- Impairment in conceptual and inferential levels of information processing

Implications of Expressive and Receptive Language Impairments

Deficits in expressive language can lead to misunderstanding the intention of expressed language and to inappropriate prognosis of the studentís actual knowledge base. This means that the studentís communication may be misunderstood by peers or adults, leading to frustration for the student and the peers or adults. Misunderstanding communication could lead to a misinterpretation of what the student wants or knows. For example, Ginny uses the phrase ìGo now.î for any situation in which movement from one place to another is involved. When the teacher asked Ginny what we used cars, planes and buses for, she replied "Go now." The teacher misinterpreted her response to mean that Ginny wanted to leave the room and go home. In reality, Ginny knew that cars, trains and buses were used to go from one place to another - transportation.

Deficits in receptive language can lead to inability to follow directions, learn critical skills, and interact appropriately in all environments. If a student has difficulty with receptive communication the educational environment will pose great challenges for the student. For example, Jamalís preschool class was working on the concepts of over and under. Each student was supposed to crawl under the table and then climb over the padded therapy tube. Jamal did not understand the teacherís request to crawl over and under the objects, thus he did not perform the task.

It is important for educators, family, and peers in a studentís life to learn about the studentís communication abilities - both receptive and expressive - so that the student will experience success, and less frustration at home, school, work and the community. In Ginnyís case, once the teacher and peers understood that ìGo now.î meant moving from one place to another the teacher could reward Ginny for the response when she used the phrase appropriately. In Jamalís case the preschool teacher demonstrated the concepts with him several times to help him understand what ìover the tubeî and ìunder the tableî meant. Many students with autism learn language and other concepts in one setting but do not generalize the information to other settings. Therefore it is important to teach the student to use the language or concepts across settings.

Domain: Cognitive Functioning

Area: <u>Repetitive and Stereotypic Patterns of Behavior, Interests, and Activities</u>

The repetitive and stereotypic behaviors often noted in autism may appear to be a collection of odd behaviors. However, they reflect a particular cognitive deficit that characterizes the disability. "This deficit is characterized by a nearly ëphotographicí memory for details on the one hand and, on the other, by a deficit in the processing of information." Minshew and Rattan (1992). This dichotomy leads to problems in detecting complex patterns as well as cause and effect relationships. "In the biological process of information analysis, the brain achieves in essence a "figure ground" transformation of incoming information in which certain details are suppressed to allow the emergence of a pattern." This means the student can see part of the picture in intense detail, but not the whole picture. The implication is that a student might focus on one object (e.g., ball on the floor) and not see other objects around the ball (e.g., toys, desks, people). Another implication is the ability of the student to see cause and effect, either concrete (e.g., a stack of books falling when the bottom one is pulled out) or abstract (e.g., being ignored by peers when behaving poorly).

The development of this cognitive process appears to be disturbed, which accounts for both the remarkable quality of memory for details in all sensory modalities and problems with information analysis.

Characteristics of this deficit include:

1. Interest in parts of objects.
2. Negative reaction to change.
    - attempts to control change through rituals
    - inability to predict the consequence of change.
    - trying to direct the behavior of others and the environment (e.g., desire for rigid scheduling of activities, need for specific routines, becoming upset by changes in seasons, foods, room arrangements, movement of people within environments)
    - increased dependence on familiar adults as the student ages

3. Lack of awareness of danger may reflect the inability to predict consequences.
4. Idiosyncratic fears may reflect memory for isolated events that were frightening and the inability to bring perspective to these events in the absence of reasoning ability.
5. Preoccupation with particular topics or interests with an intense focus on details may reflect the lack of understanding of concepts which might lead to a broader range of interests.
6. Stereotypic motor movements seen in younger students and in students with lower IQ scores (e.g., body rocking, hand flapping, pacing, posturing, twirling, humming, and screeching); older and higher functioning students may have muted and channeled this

motor behavior. Students with autism usually have more frequent and less easily redirected stereotypic behavior than other students with the same IQ levels. (Minshew and Rattan, 1992)

<div align="center">Implications of Repetitive and Stereotypic Behaviors</div>

For students with autism, transitions from one focus to another, whether it is an object, person, event, or environment may be very difficult without the appropriate supports in place to help the student make the transition. While most students who are non-disabled will eventually learn to accept transitions (e.g., from the classroom to the lunchroom) easily, the student with autism will need supports (e.g., information and time to prepare for the transition) to successfully shift focus. For example, Erik had a copy of the class schedule taped on his desk. He had learned that his class left for lunch each day at 11:30. One day his class was going to leave for lunch at 11:00 instead of the normal time. In the morning, to prepare Erik for the change, his teacher placed a new schedule on his desk over the old schedule and discussed the change with him before class started, during each transition, and when lunch time drew near. This preparation for the change gave Erik a chance to prepare for the transition to the new lunch schedule.

Domain: Physical Functioning

Area: Sensory Skills

Sensory skills must be considered if the student has such problems. Any or all of the studentís senses (sight, sound, touch, smell, taste) may be very sensitive and interfere with the studentís ability to fully or partially participate in learning activities. For instance, sound sensitivity (e.g., keen awareness, troubled by certain sounds) and tactile defensiveness (e.g., not wanting to touch certain textures/objects) are fairly common in younger children with autism and needs special attention. Depending upon the sensitivity of the student, there may have to be control of some sensory input within educational environments until a student can become desensitized. For example, if the student is hyper sensitive to high pitched tones and the school bell rings in a high pitch, it may be necessary to disconnect or reduce the sound of the school bell tone from the classroom until the student has built up tolerance for the sound.

Implications of Sensory Impairments

If a student has sensory impairments every environment can pose a challenge to successful learning. Educators, family and friends should carefully analyze environments in which learning will occur to determine which sensory inputs may interfere with the studentís learning and either reduce or eliminate the sensory challenge (e.g., tone of a bell) or, when sensory input can not be eliminated or reduced to a satisfactory level, provide the supports necessary to help the student compensate for the problem. In addition it is critical to understand what sensory input the student needs to be successful.

Area: Motor Skills

Motor skill problems are also prevalent in students with autism. These problems can include motor planning (e.g., moving around a room), poor muscle tone (e.g., difficulty holding a crayon or pencil), spatial skills, or general understanding of body-in-space (e.g., understanding self in relationship to other objects in a room). Students with motor skill impairments will have difficulty

with some activities while seeming to excel in other areas (e.g., a student who cannot hold a pencil but can perfectly spin objects smaller than a pencil).

<u>Implications of Motor Skill Impairments</u>

If a student has impairments in motor skills simple tasks become large challenges. It is important for educators, family, and peers to understand the motor skills of each student so that learning experiences do not present tasks which the student is incapable of accomplishing without supports. Motor skills should be evaluated and considered in the planning of instruction for the student with autism.

Area: <u>Health Skills</u>

Health and cleanliness are areas that may be impacted by the core deficits of autism and may be addressed on an IEP. Students with autism may have problems with these skills in part because the skills involve sensory and motor skills as well as following established routines in sequence.

<u>Implications of Deficits in Health Skills</u>

Poor health skills put the student at risk for physical problems (e.g., poor care for teeth - loosing teeth) and social criticism. If a student has poor health habits it is likely student will receive a negative social response such as being ignored or avoided. It is important to keep in mind the studentís sensory and motor skills and or impairments and their potential impact on the student learning health skills. For example, if a student has poor motor skills using a comb or brush to tidy hair may be a difficult task. Educators, family, and peers can teach the student specific concrete steps for personal health and cleanliness.

Domain: Educational Functioning

Area: <u>Basic Skills</u>

Academics, functional application of facts, computer skills, and other curricular issues will vary across students with autism since their cognitive abilities and skill profiles are so different from each other and from peers. It is important to build and expand upon each studentís strengths.

<u>Implications of Impairments in Educational Functioning</u>

Each Admissions and Release Committee and multidisciplinary team will need to address the implications of a studentís educational functioning differently based upon the needs of the student and the requirements of the learning situation.

<u>Summary of Personal Challenges</u>

For students with autism, it is necessary to understand how the challenges of autism affect learning and the ability to function in a competent manner. Personal challenges unique to students with autism fall into four main domains: social competency, communication functioning, cognitive functioning, and physical functioning. Analyzing assessment information, observations, and personal reports on these four domains collected across multiple settings will provide an accurate picture of the studentís major personal challenges.

Environmental Challenges

The personal challenges previously described are the factors <u>within</u> the student that jeopardize the development of competence. Because of these within-person characteristics, the student with autism is potentially at-risk in any environment. Sometimes when people cannot ìseeî the disability, they discount its existence, and ìlabelî the student as noncompliant, lazy, or behavior disordered. The misconception that the student with autism is noncompliant or obstinant is a good example of the environmental challenges, the second quadrant of the competency model, that poses challenges for students with autism.

As indicated in Figure 8, this section will focus on the challenges within the environment that put a student at risk. **Environmental challenges** include the people, places and things with which the student must interact to be successful. The environmental challenges which put each student at risk will be quite varied. However, *it is the studentís response to those challenges* that draws the attention of educators, family, and peers. The environmental challenges become evident through the behavior, or response of the student with autism to the environment.

FIGURE 8 Autism Competency Model

| Protective Factors | | Risk Factors |

Personal Resources		Personal Challenges
Environmental Resources		Environmental Challenges

The basis of many behavior problems in students with autism is fundamentally different in origin from other students with similar behavior responses. Therefore, attempts to use behavior management programs and approaches typically used for individuals without autism may not be successful with students with autism and may in fact aggravate the behavior. To address environmental challenges, a positive behavior management system must be developed based on an understanding of the deficits and abnormal behavior associated with autism.

Perhaps the most important point educators and parents must understand is that the ***nature of autism inhibits adaptability and generalization of behaviors across settings.*** Thus deficits and abnormal behavior must be considered in relationship to <u>each</u> environment so that the supports are in place which allow the student to be successful. This means that each different environment poses a challenge for a student with autism. The student will not automatically take appropriate strategies from one environment and apply them to another environment. Therefore supports and adaptations must exist in each environment in which the student interacts.

Conditions within the environment that may pose challenges for a student with autism include the following:

1. People who do not understand
   o the nature of the deficits of autism;
   o how to provide the supports and modifications for the student;
   o appropriate behavior management, (e.g., using consequence, correction, and negative punitive methods instead of positive behavior tactics);
   o the perspective of the student with autism;
   o how to recognize and use strengths and interests; and
   o communication efforts and problems.
2. Social factors that include

   o demands that are beyond the capabilities and tolerance of the student;
   o a lack of socially responsive peers/people; and
   o a lack of teaching social interaction skills (e.g., student is teased, or left out).

3. Overwhelming stimuli such as crowds, noise, pace, and movement which offer no place or time for the student to escape the stimuli.
4. Behavior demands that are difficult for the student. (e.g., sitting too long, hurrying, waiting, sharing, turn-taking, being corrected and admonished, pressure to perform, or being put ëon-the-spot')

5. Lack of structure with continuous change. (e.g., Lack of consistency within a program and across people and settings)

6. Failure to provide the supports that are needed to succeed.

7. Lack of collaboration between home, school, and other team members.

8. Failure to diagnose the disorder of autism.

Implications of Environmental Challenges

When the environment produces challenges, whether events, people, places, or things, the student with autism will have difficulty being successful. It is important to understand how much the environment has an impact on the student with autism when even the simplest activities could pose great barriers for the student. This means that teachers, parents and other educators working with the student should continuously analyze the learning environments where the student will be participating in instructional or social activities and consider appropriate techniques to assist the student with successful interactions within the environment.

Summary of Environmental Challenges

The impact of environmental factors will vary with the age and circumstances of each student. At times it may appear that everything is going well, and therefore the supports can be decreased or removed. At other times it may appear that in spite of fairly consistent support, the behavior or learning of the individual with autism is slowing or becoming worse. Outside influences (e.g., a move, a divorce, a change of jobs for a parent, or a new baby) cause such stress that additional supports are necessary to keep the student in balance. The Admissions and Release Committee and the multidisciplinary team should gather and consider data relevant to the environmental challenges which face a student with autism as they make decisions about the studentís IEP and daily instruction.

Summary of Risk Factors

There are two elements of the studentís life which pose problems or risks: personal challenges and environmental challenges. If the personal and environmental challenges are the only factors considered for the student with autism the scale will be heavily weighted on the deficit side.

When the deficit side of the scale is overweighted the student will experience great difficulty in all environments - school, home, work, and community. Figure 9 illustrates the imbalance that occurs when the focus, or weight, is on the problems or challenges facing the student, particularly the problems inherent within the student. The model will be off balance when the majority of the information known, or reported about a student focuses primarily on what the student cannot or does not do. This skewed focus throws off the balance of an effective instructional plan. No one would be successful in a learning environment where the focus was primarily on what she or he *could not do*! When the personal challenges of the student are the primary focus of instructional decisions the scale becomes unbalanced and the likelihood of student success dwindles.

When the scale is imbalanced and the student is experiencing problems it is important not only to consider what has been focused on - such as personal challenges - but what is out of focus or balance. For example an imbalance of the competency scale would occur when the environmental challenges are not considered as part of the problem a student is facing. In this case, an environmental challenge, such as an overstimulating environment, may be the very thing causing the problem. If the environmental challenges are ignored, or remain out of focus, the student will continue to experience problems within learning environments.

FIGURE 9

Unbalanced Competency Model

Protective Factors   **Risk Factors**

Personal Resources		Personal Challenges
Environmental Resources		Environmental Challenges

Focusing too much on one or the other of these two risk factors will create a problems for students with autism. When this occurs, the student is expected to perform in an environment where the risks that comprise autism immediately put him/her at jeopardy in the learning process. The task of balancing the weight on the scale of success becomes the collaborative responsibility of the educators, family, and peers. To balance the scale, consideration must be given as to which resources are evident within the student and the environment that will counterbalance the problems facing the student. To counterbalance the risk factors the ARC and multidisciplinary team must understand and consider the **Protective Factors (Personal Resources and Environmental Resources)** available and necessary for student success.

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Understanding Protective Factors

Protective factors are found on the left side of the Autism Competency Model. The protective factors counterbalance the risk factors and relate directly to the development of competence for the student. This side of the scale focuses on the resources (strengths) of the student and the environmental resources which support successful learning experiences. In this section personal resources will be discussed first as indicated in Figure 10, then environmental factors will be discussed.

Personal Resources

The first protective factor - **personal resources** - represents the strengths, interests, and preferences of the student with autism. The ARC and multidisciplinary team must take into consideration the strengths, interests, and preferences of each student as they develop the IEP and daily instruction. Using this information for the development of an instructional program increases the likelihood that each student will be successful. Learning experiences which focus on the studentís personal resources will increase the studentís repertoire. Therefore, the list of interests and preferences will grow. The list of strengths may also change, but there are some general strengths typically found with students who have autism.

FIGURE 10

Autism Competency Model

Protective Factors   Risk Factors

Personal Resources		Personal Challenges
Environmental Resources		Environmental Challenges

Personal resources comprise the way the student learns best and the strategies the student uses to learn. The student with autism is an individual with unique strengths. Some typical **strengths** include:

- memory (rote, visual and auditory, short-term);
- memory for detail and attention to detail;
- visual-spatial activities;
- concrete thinker and learner;
- lack of pretense - directness and honesty;
- precision and adherence to rules and routines when learned;
- perseverance; and
- stamina.

Educators, family, and peers should determine the strengths of each student with autism and keep those strengths in mind as they design and implement instruction. In addition to the studentís strengths, it is vital that the preferences and interests of the student with autism are understood. This information can be used to determine motivators and reinforcers that encourage learning other subjects and bridging skills into functional use. The **preferences and interests** of

students with autism are unique to the individual and constantly changing, however, some typical ones include:

1. Movement

    - Repetitive movement, (e.g., spinning, rocking, pacing, jumping, bouncing).
    - Moving - (e.g., climbing, running, swimming, jumping, swinging, walking).
    - Riding in car or bus.

2. Interaction and Stimulation - visual, auditory, physical

    - Music, often specific songs and types of music.
    - Certain TV shows - (e.g., game shows like Wheel of Fortune, Jeopardy; wrestling, news, shopping channel, cartoons, or a certain sitcom).
    - Videos - (played over and over such as Disney, Barney, cartoons).
    - Books, magazines, catalogs.
    - Computer games.
    - Things that blink, reflect, spin, shine, sparkle.
    - Water - pool, bath, sink, toilet (may not like shower).
    - Numbers, letters, words, spelling.

3. Manipulation of objects

    - Little things to arrange and manipulate.
    - Manipulating electronic equipment (e.g., VCR, tape player, TV, microwave).
    - Collecting and categorizing items.

4. Routine and predictability
5. Being in control - knowing what is going to happen next
6. Praise
7. Success
8. Trendish (fad) consumer items
9.
    TV, movies, dolls, etc. (e.g., Power Rangers, Garfield, Little Mermaid, Barney, Lion King, Mickey Mouse, Snow White, or Sleeping Beauty).

Implications of Personal Resources

If a student with autism does not seem to be motivated to learn or take part in activities, consider whether the studentís strengths and interests are incorporated into the educational environment. There is a long list of questions to ask when an ARC or multidisciplinary team is evaluating the motivation of a student. Twenty questions related to motivation are listed in the Manual Toolkit. Here are just a few:

- Are activities useful and meaningful for the student?
- Is information given so the student understands?
- Are the studentís likes, interests, and strengths developed and utilized?
- Is feedback given immediately so the connection between the reinforcer and the event is clear?

Often the personal challenges of a student with autism hide strengths and interests. Sometimes the very behaviors that may trouble people, like compulsions (e.g., straightening things), can be the strengths of the student that help them reach success. Interests may be sensory in nature and reveal the use of strengths such as visual processing or sequencing. These preferences should be known so that they can be built into an instructional program and expanded upon. When the personal strengths, or resources of the student are known, and built into the learning environment of the student, the scale begins to balance - or offset - the personal challenges facing the student.

Environmental Resources

Environmental resources, in the fourth quadrant of the competency model (See Figure 11.), are perhaps the most critical factor of the *Autism Competency Model*. When the risk factors and personal resources are identified and understood, the educational program for the student can be designed to include strategies, resources, and supports that will enable the student to build competency in a variety of areas.

FIGURE 11

Autism Competency Model

Protective Factors   Risk Factors

Personal Resources		Personal Challenges
Environmental Resources		Environmental Challenges

Environmental resources are those strategies, materials, and conditions that support student learning. Given what is known about autism and the impact it can have on at least four of the eight domains (cognitive, social, communication, and physical - including sensory and motor) there are environmental supports that can greatly enhance the studentís learning.

In many educational settings the environmental supports are referred to as modifications or adaptations. *Environmental enhancements can be defined as changes to the environment, instruction, personnel, or materials used for learning that enhance the studentís performance or participation (full or partial) in an activity.* In an eight year study of teachers who collaborated to serve students with disabilities in the regular education setting, Moll (1996) identified at least sixteen general areas for environmental enhancement strategies used by teachers to enhance student learning. In the study, teachers reported that when they first started using enhancements not commonly used for other students they sometimes hesitated because of a lack of understanding about the *purpose* of the enhancement, not because of the appropriateness of the suggested enhancement. Once the teachers fully understood the purpose and its connection to the studentís need and the instructional objective, the provision became ìnearly invisibleî, or a natural part of the instructional environment.

The sixteen types of enhancements which could support students, including examples, that were identified in the study are described next. Many of these enhancements are already in use by educators and families in the classroom and at home.

Sixteen Types of Enhancements to Build Supports for Students with Autism

Participation - the degree or level a student must engage in the activity to benefit from the instruction to meet identified goals.

> *e.g., in language arts allow the student to hold picture cards as students identify beginning sounds*

2. **Time** - the amount of time provided for learning, project completion, or performance assessment.

> *e.g., allow the student sixteen additional minutes to complete a task*

3. **Pace** - the speed/steps of instruction.

> *e.g., teach a science experiment in smaller steps; work 10 minutes rest 2 minutes*

4. **Size** - the magnitude of the task.

> e.g., minimize or maximize drill and practice of new/old concepts; allow student to "check-out"of a topic by completing an adequate number of tasks prior to teaching the topic; or after teaching the topic; allow student to demonstrate mastery of most difficult math calculations and then move on without repeated performance

5. **Input** - the methods through which instruction is delivered (in a variety of modes) to match the student learning style.

> *e.g., use visual aids with lecture, concrete examples;audiotapes, videotapes*

6. **Output** - multiple methods of response to a task, instruction, or assessment.

> e.g., allow verbal responses, written responses, drama, pictures

7. **Difficulty** - the skill level, rules, approach to the problem.

> *e.g., use number lines or calculators*

8. **Physical Environment and Materials** - the texture or physical make up of the materials used and the attributes of the environment.

*e.g., use soft foam blocks instead of wood; enlarge the print of a
text; use sliding paper plates for teaching ratios; use diffused
lighting; learning space with little.or no stimuli*

9. **Level of Support** - the degree of personal assistance needed to accomplish tasks (increased or decreased).

   e.g., peer buddies, mentors, instructional assistants; time alone

10. **Organization** - the methods and techniques for organizing information, materials, and structure

    *e.g., provide a specific schedule in print for student, teach
    procedures for going through the lunch line*

11. **Location** - the type of zone or scene used for learning.

    *e.g., allow the student to lay down on the floor while doing math
    computations; allow a student to go to a restaurant to learn about
    food groups*

12. **Motivation** - the incentive for student performance.

    *e.g., provide specific menu of reinforcers for the student; move
    from extrinsic to intrinsic reinforcers*

13. **Social** - the degree, purpose, and types of social interaction expected.

    *e.g., allow the student to sit outside of the social group and
    watch, allow the student to participate in an instructional activity
    for the purpose of communication*

14. **Behavior** -the expectations, degree, and purpose of conduct in learning environments

    *e.g., provide specific expectations for behavior, define a specific
    behavior differently for the student*

15. **Alternate Goals** - the type of IEP goals for a student other than the expressed goal of instruction for an entire class, using the same types of materials and/or class time.

    *e.g., work on behavior in small math groups; student identifies
    name, address, etc. while other students work on job application*

16. **Parallel Curriculum** - the use of different instruction and equipment for individual goals.

    e.g., student works on transportation skills in the community
    while other students are engaged in literature research

These sixteen types of extensions outline general categories that can be adjusted to meet the individual needs of the student. The Manual Toolkit has an outline of these sixteen types which can be used as a tool for developing appropriate instruction for any student regardless of their

abilities. The important point is that different students will need different supports throughout their educational career and life.

Common Areas of Support for Students with Autism

Even though each student with autism is unique, there are *specific environmental supports that should be considered and addressed for any student with autism*. These supports include:

1. **Supports for Social and Behavioral Competency**
   <u>Domain</u>**: Social Competency**
   <u>Studentís abilities in</u>: **Social interaction, Imaginative Play, Safety**

It is important that the expectations of educators, family, and peers are realistic and within the studentís developmental level of social skills. When developing social interaction skills, the student needs models of positive, interactive social behavior. It is also vital that the student has the opportunity to interact socially with peer role models. In most cases, same age, non-disabled peers will need specific training and feedback so they can understand the needs of the student and provide optimum opportunities for the student to interact.

The importance of understanding the personal and environment risk factors of the student has been stressed throughout the discussion of the Autism Competency Model. It is often the behaviors of the student with autism that set the initial standard for expectations of the student - meaning that teachers, parents, community members, or peers may observe a student with autism and accept the first behaviors/responses seen as the sum total of who the student is and how the student will behave. Developing the appropriate environmental resources is critical to the success of the student at home, school, work, or in the community. Careful and consistent behavior strategies must be implemented to support the studentís successful learning.

Another area in which the student with autism may need assistance is imaginative play. The student may need specific supports, such as concrete demonstrations of skills such as role playing. Educators, family, and peers must understand the behaviors of the student to determine when the student is engaging in imaginative play even when the studentís behavior may not reflect the type of play anticipated.

In addition to social interactions and imaginative play the student with autism may need supports in learning and applying safety skills. The student may need visual and verbal supports to follow safety rules. It may be necessary to teach the student concrete interpretations of safety skills (e.g., keeping hands to oneself) in multiple environments.

Based upon the studentís social competency, supports may be appropriate from any of the sixteen types of extension: participation, time, pace, size, input, output, difficulty, physical environment and materials, level of support, alternate goals, location, behavior, social or motivation.

2. **Supports for Communication**
   Domain**: Communication Functioning**
   <u>Studentís abilities in</u>: **Expressive and Receptive Language**

The student with autism needs a variety of ways to communicate in a variety of settings. The student can flourish with understandable, consistent, and reliable information along with time to

process information and to respond in environments that encourage communication across environments and people (e.g, using Yes and No effectively in school, the community and at home). Of the sixteen types of extension taken in relationship to communication, students with autism may require support in input, output, pace, difficulty, level, motivation, behavior, social, and time.

3. **Supports for Physical Needs**
   Domain**: Physical Functioning**
   Studentís abilities in: **Sensory skills - visual**

Students with autism are trying to figure out what they are supposed to do and need the visual mode to help them succeed. It is difficult for the student to use auditory information in isolation (without any other cues) due to problems organizing and sequencing material , past experience, reaction to a stimulus cue, sensory overload, processing delays, and retrieval problems. Visual aids should be an integral part of the learning environment for a student with autism. Supports from input, output and physical materials are typically used to support the visual needs of the student needing this type of support.

Student's abilities in: **Sensory skills - surrounding stimuli**

Students with autism may have difficulty when the learning environment is not structured, sequential, and predictable. Structured atmospheres allow the student to understand sequences of events, expectations and procedures. In addition, student with autism may have problems focusing on specific information in an environment with multiple stimuli. A student with sensory ìoverloadî (e.g., too many sights, sounds, smells) may need to have some control over the stimuli. For example, the student may need a quiet place in the room where noise, smells, or sights can be lessened or eliminated. Depending upon the degree of sensitivity to the surrounding stimuli (smells, sights, sounds, textures, tastes) the student may require one or all of the sixteen types of extension to be successful.

Domain**: Physical Functioning**
Studentís abilities in: **Motor skills**

Students with autism may experience problems in motor planning, muscle tone, spatial skills or general understanding of body-in-space. Depending upon the unique strengths and problem areas the student may require support in participation, time, pace, size, input, output, difficulty and physical environment and materials.

Domain**: Physical Functioning**
Studentís abilities in: **Health skills**

Sensory and motor problems and the studentís ability to follow established routines may impact the ability to maintain some health skills. Supports in areas such as pace, input, output, location, and physical environment and materials may be necessary to help the student improve and perform health skills.

4. **Supports for Organizing Information**
   Domain**: Cognitive Functioning**
   Studentís abilities in: **Repetitive and Stereotypic Patterns of Behavior, Interests, and Activities.**

The student with autism needs to learn and use methods for organizing information, methods, and materials. The student can learn when specific methods or procedures are taught and

practiced (e.g., steps for checking out a book at the library, location for storing toys or favorite objects). Another area which often needs support is the general structure of classroom procedures, schedules, and activities. The student with autism may need advanced notice when an unexpected change is about to occur to the typical school schedule, activities, or operating procedures. In this case the student may require additional supports in the areas of time, pace, input, output, and physical environment.

Summary of Environmental Resources

Appropriate environmental resources cannot be successfully developed or applied without an understanding of personal resources as well as the risk factors involved in the studentís life. When the educators, family, and peers understand each quadrant of the competency model and apply their expertise and effort to balancing all of the factors involved the learning environment will provide optimum opportunities for the student to succeed.

Conclusion of Section Two

The single most important factor in building a successful learning environment for a student with autism is supportive and flexible educators, family, and peers. Teaching a student with autism requires a great deal of effort and analysis. Systematic, data-based strategies are necessary to effectively decide whether methods are successful in reaching individualized goals and objectives. Although they have special difficulties that challenge everyone who knows them, students with autism can be taught to be competent. The Autism Competency Model provides a specific method for considering and organizing data, considering impact, and making informed decisions about instructional delivery that will help the student with autism be successful in school, home, work, and in the community. The strategies used to effectively adapt learning environments for a student with autism help the team become better teachers for other students who may or may not be disabled.

Section Three Using the Autism Competency Model to Develop the Individual Educational Program

What is an Individual Education Program?

IEP stands for Individual Education Program. The IEP tells just what the school is going to do to meet the special needs of a student who has an educational disability. The IEP is a record of the decisions made by the **Admissions and Release Committee (ARC)** that sets forth in writing a plan of action and a commitment of the resources needed to enable a child to receive a free and appropriate public education. By State and Federal requirements, the IEP must be developed during a meeting in which all the required members, including parents, regular education teachers, special education teachers, an administrative representative and the student, if appropriate, participate. In Kentucky, this meeting is called an Admissions and Release Committee.

In practical terms, an IEP is a document that specifically outlines the educational plans for an individual student for one calendar year (365 days). In Kentucky the required components of the IEP are: Present Level of Performance, Annual Goals, Short Term Instructional Objectives, Implementers, Special Education and Related Services, Participation in Regular Education Program, Appropriate Objective Criteria and Evaluation Procedures, Schedule for Review, and Transition. Each of these components is briefly described in the next question.

What information is in an IEP for a student with Autism?

An Individual Education Program is based upon the unique needs of an individual student. Therefore, when working with several students who have autism **_each studentís IEP will be different_**. The ARC makes specific decisions about the studentís identified needs using evaluation and ongoing progress data and documents the decisions on the IEP and the Conference Summary Report. Regardless of the type of disability or level of student need, every IEP contains required components. These components are described in detail, with an accompanying student example.

Components of an Individualized Education Program
Present Level of Performance

The present level of performance describes what the student can and cannot do compared to other children of similar age. The ARC decides present levels of performance based on a review of the most recent evaluation data, as well as parent input and school progress data and includes adverse effects on educational performance. Areas addressed in the present level of performance include physical functioning, communication functioning, cognitive functioning, social competence, academic performance, vocational functioning, and recreation and leisure functioning. The Present Level of Performance provides a picture of what the student currently can do and provides information that allows the ARC to set annual priorities for the studentís educational progress.

The present level of performance includes the impact of the disability on educational performance. This means it describes the effect of problems in any domain on the studentís involvement and progress in the general curriculum; that is, the performance of the student in <u>any area of education affected</u>. These areas include:

- traditionally academic areas as reading, math, communication, and vocational skills;
- nonacademic areas such as social competence, sensory and motor skills, and life skills;
- transition between in school programs, out of school programs, and post secondary environments; and achievement of student capacities and life goals (including how those are assessed).

The present level of performance accurately describes how problems in each domain affect the progress of the student to the extent that educational performance is significantly and consistently below the range of performance of similar age peers - to such a degree that specially designed instruction and related serves are needed by the student. Educational performance for all students is identified by Kentuckyís learning goals and academic expectations. These include acquiring, developing, understanding, or applying knowledge or skills needed for academic performance or social competence.

An example from **one** of the eight domains the ARC needs to address follows. <u>Present Level of Performance for Bruce</u> **Area**: <u>Communication</u>

Strengths - based on informal assessments, Bruce understands words, phrases, and sentences equivalent to a student who is 6 years old. He follows directions when they are written, shown by pictures or when they are demonstrated to him first. Bruce does express some sounds, but uses the same sound for multiple requests or responses. (For example he says ìgoî any time he wants to leave the room or move within the room.) Bruce can also express information that has been voiced by another person - up to 5 and 6 sentences with 100% accuracy. (For example, Bruce can repeat the first two paragraphs of the Story time story.)

Concerns - Bruceís expressive language is inconsistent compared to peers of the same age and grade. In class, Bruce often gets up or takes an object without expressing the desire to do so. Additionally, when Bruce does express sounds for activities, he uses the same sound for almost every request making it difficult for peers and teachers to understand what he wants. Bruce can repeat what has been heard, but does not does not express new ideas, requests for assistance, or for use of objects on a consistent basis. For example - he does not ask using sound or gesture to go to the restroom or for a book - he simply leaves the room or takes the book, even if another student is using it.

Impact on Educational Performance - Bruce will have problems working in large and small groups; adhering to classroom rules, and participating in class discussions. Long range impact: he will have difficulty being successful at home, school, work and in the community without an expressive communication system that can be understood by educators, family, peers, co-workers, and other adults.

(This example represents only <u>one</u> domain of the Present Level of Performance section.) With information such as this in the Present Level of Performance component, the ARC can make specific decisions and prioritize which areas of concern will be addressed in the Annual Goals component of the IEP.

Measurable Annual Goals

Annual Goals relate directly to the needs identified in the Present Level of Performance. Each annual goal focuses on skills in one instructional area. The Annual Goals project what the ARC believes can be reasonably accomplished in one yearís time. For example, here is one of Bruceís Annual Goals related to communication: *Annual Goal for Bruce*

Bruce will improve communication skills in the area of expressive and receptive language.

The instructional area is *communication* and the skills are *receptive* and *expressive* language. The skills of the Annual Goals guide the development of Short Term Instructional Objectives. The use of the term ìdemonstrate effectiveî in combination with the short term objectives make the goal measurable.

Short Term Instructional Objectives (Benchmarks)

Short term instructional objectives (STOs) are written for each Annual Goal. Short Term Instructional Objectives focus on each skill area and define the specific behavior and criteria expected of the student when the student has mastered the objective. The STOs are used to help the multidisciplinary team determine daily instructional needs. For example, here is one of Bruceís Short Term Instructional Objectives related to his communication Annual Goal: Short Term Instructional Objective for Bruce

By December 1, 1997, given a communication card set, Bruce will make a request - either for an activity or an object - by showing (touching) the picture of

the object and verbalizing the request to an adult or a peer in at least three different educational environments for five consecutive days as documented in his student notebook.

This STO indicates that Bruce will be encouraged to ask for things or activities by showing a picture and voicing the request in a variety of settings. How well Bruce performs on this objective and the improvements he makes will be documented in a student folder. This means that the ARC predicted that Bruce could reasonably accomplish the objective by that date. In addition, by setting a short term date, the ARC is committed to looking at Bruceís progress toward the annual goal no later than the December date. Good instructional practice suggests that ongoing progress data is examined every week on a objective that is worked on daily - so Bruceís team would not wait until December to stop and reevaluate the objective if he was not making satisfactory progress. Once the Short Term Instructional Objectives are written, the team can then determine what specially designed instruction he might need to meet this goal.

Specially Designed Instruction and Related Services

The Specially Designed Instruction (SDI) section of the IEP describes the materials, methods, strategies or services that are not normally provided for a student of the same age and grade, but are necessary for the student with a disability to accomplish the Short Term Instructional Objectives. For example, using the short term instructional objective above the SDI might include:. ***Specially Designed Instruction for Bruce's Objective on Communication***

- *token reinforcement system*
- *one-on-one direct instruction*
- *small group instruction*
- *communication system using photographs (e.g.,objects; activities in which the the student engages within the home, school, work, and community)*

This SDI indicates that at various times throughout the instructional week implementers will work on that particular objective with Bruce in small groups and one-on-one in a variety of environments. They will use photographs of real objects or activities Bruce likes to engage in to encourage him to improve his expressive communication skills. Once the SDI is written the ARC can determine who will be responsible for implementing the instruction to reach the objective.

Implementer(s)

The implementers are the individuals who are responsible for the implementation of the Short Term Instructional Objectives. The ARC states types of implementers by title - not by name. While it is not required by law that family, peers, or co-workers implement Short Term Instructional Objectives, in many cases, the objectives can be easily implemented at home, work and in the community. Implementers monitor and document progress toward mastery of goals and objectives. There may be a variety of individuals working on the same objective, with the same materials in a variety of settings. Typically implementers include special education teachers, regular education teachers and other specialists (e.g., speech language pathologist). At least one implementer must be qualified to deliver instruction. A list of implementers for Bruceís short term objective might look like this: Implementers for Bruce's Objective

General education teacher; special education teacher; speech language;pathologist, physical therapist

In addition, there are many other people who might work on that objective with the student but who might not be listed in the implementer component such as the lunch room monitor, peers, church class, or librarian.

The more consistent the environments are for a student with autism, the greater chance she or he will learn appropriate skills and behaviors. Therefore, if educators, family, peers and others can be actively involved in helping the student work on Short Term Instructional Objectives, the greater chance the student will develop and maintain the skills. For example, using the objective example above, the parents (siblings, etc.) could reinforce the use the communication card set with Bruce at home in natural environments and within community environments such as the library or video store.

Beginning and Ending Dates, Frequency, and Location

The beginning and ending dates describe the anticipated duration of the specially designed instruction for each Short Term Instructional Objective. This means when each service will begin and is expected to end and how much time each week the service will be provided (frequency).For each service listed, the ARC identifies where that service will be provided (location). This is a generic description and basically only two alternatives are used - regular classroom or special classroom. For example the specially designed instruction for Bruce included small group instruction, so the initiation and duration for this might be: ***Beginning and Ending Date for Bruce's Objective*** *Beginning September 1, 1997 and ending December, 1, 1997. 600/1800 minutes per week*

Participation in the Regular Education Program

IDEA as amended puts a new emphasis on involvement and progress in participation in the general education curriculum. The IEP must include special education and related services and supplementary aids and services needed by the student to access the general education curriculum and the special services which may be necessary for appropriate participation in particular areas of the curriculum due to the nature of the disability. If a student with a disability will not participate with non disabled students in the regular class and in the general education curriculum including extracurricular and non-academic activities, then the IEP includes and explanation for this.

In Kentucky involvement and progress in the general education curriculum is addressed as participation on the regular education program. Part of participation in the general education curriculum includes students with disabilities participating in the KIRIS and district wide assessments.

Participation in the regular education program describes how much of the school day the student will be in classes and activities with students who do not have a disability. The ARC describes participation in academic and non academic activities, and the amount of time for participation. The ARC also states any modifications needed for participation. ***Bruce's Participation in the Regular Education Program***

Bruce will participate in the primary regular education program 1500/1800 minutes each school week with large, small group and one-on-one direct instruction. Communication systems and quiet areas will be used in

each environment. Shortened assignments and advanced teaching methods will be used. 300/1800 minutes each week will be specific direct instruction in new skills in a variety of settings appropriate to the skills being taught - e.g., library, community.

This means that Bruceís team decided that he could be successful in the regular education program potentially full time. However, they felt that there may be times during the school week when he may need time away from the stimulus of the regular education environment to work specifically on certain goals or objectives. The environment might be in a corner of the classroom, the library, cafeteria, or community.

Appropriate Objective Criteria and Evaluation Procedures

This requirement is addressed in each short term instructional objective by stating how well each behavior must be done and how progress will be checked. In addition, the IEP must describe how parents will be informed of their studentís progress at the same intervals as parents on non-disabled students.

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Schedule for Review

The component indicates when the progress of the student will be checked. The ARC sets a date to review the IEP and decide if the student did what the objectives said. The date must be within one calendar year (365 days) of the date the current IEP was written and may be more frequent if needed. For example, using Bruce's IEP:

> *Current IEP was written: January 17, 1997*
> *Annual Review Date: January 17, 1998*

The ARC may reconvene to examine the goals and objectives at any time within the calendar year if goals and objectives are met early or there are indications that the IEP may not be appropriate. HOWEVER, the ARC **must** reconvene *at least* once every calendar year (365 days) to discuss and make decisions related to the studentís educational program.

Transition If the student is moving from preschool to primary, school to school, or is age 14 or older, the ARC addresses transition as part of the IEP.

Will there be any similarities among the IEPs for students with Autism?

Regardless of disability, every student with an educational disability will have a unique Individualized Education Program. The content of student IEPs will vary given the nature of autism and its variable impact on student functioning levels in the domains described in Section One. However, there are likely to be goals and objectives based on at least four of the eight domains - cognitive, social, communication, and physical (motor and sensory skills) - on the IEPs of students with autism. Even within these domains, the degree of need, goals and objectives will vary based upon each studentís unique needs.

<u>Domain: Social Competency</u>

Social interactions is an area of social competence typically addressed in the IEP of a student with autism**.** Appropriate behaviors, getting along with others and other components of social interaction such as sharing, taking turns, conversing, negotiating, playing, and helping others will need to be taught. The social skills of politeness and environmentally specific social rules will have to be addressed. Students with autism do not learn subtle social interaction patterns incidentally or from correction, nor do they readily transfer information on social skills from one environment to another. The student will need to be taught specific social skills and rules within each environment.

Safety skills is an area of social competence that is of great importance for a student with autism which may need to be addressed in an IEP. Staying in boundaries, safe use of materials, understanding about strangers, knowing about drugs and sexuality, and refraining from harming others are some safety issues that may have to be taught and addressed in the IEP.

<u>Domain: Communication Functioning</u>

Expressive and receptive language is vital to the learning of a student with autism. Since communication requires reciprocity (mutually giving and taking), both the receptive and the expressive skills must be addressed. The student typically needs individual teaching and applied teaching across settings. Whatever the age of the student, the ARC should consider communication needs as they develop the IEP.

The primary focus of communication goals should be the creation and use of a communication system that is understood by a large number of people and does not require interpretation. A student with autism may demonstrate inappropriate behavior as the result of not being understood or from a lack of understanding. Therefore the communication system should include both how the student communicates to others and how others communicate with the student.

For example, if the student is in a classroom where most of the instruction is verbal, the student will likely become lost. Typically the verbalizations in school settings are rather fast, complex sentences which may be difficult for the student with autism to understand without individualized direction, accompanying pictures, or pre-teaching.

<u>Domain: Cognitive Functioning</u>

One **cognitive functioning** pattern commonly found to be an area of deficit to students with autism is the use of repetitive and stereotypic patterns of behavior. As part of the cognitive process students are capable of remembering minute details yet may be unable to analyze even the simplest information. Due to this dichotomy of cognitive processing the student may have unusual patterns of behavior such as intense interest in parts of objects, peculiar fears or preoccupation with people, topics, or things. In particular this cognitive deficit can impact the student's ability to understand cause and effect, which are integral parts of daily living (e.g., safety) and learning.

Cognitive skills must be taken into consideration when designing the IEP for the student. Some students with autism will have goals and objectives on this domain throughout their school career while other students may have goals and objectives early in their school career or sporadically throughout their educational life. The primary concern in this deficit area is for the student to learn cause and effect and appropriate use of the behaviors (e.g., use studentís attention to detail when describing an object from a story).

<u>Domain: Physical Functioning</u>

Sensory skills should be considered and addressed on the IEP if the student has sensory problems. Each of the senses (sight, sound, touch, smell, taste) should be assessed and analyzed to determine if the student is hypo- or hypersensitive. Depending upon the sensitivity of the student, the ARC may determine that goals and objectives should address both the desensitization to, and the control of, some sensory input within educational environments. For example, if a student was hypersensitive to environmental stimuli, desensitization could be part of the IEP which might look like this:

When he first started school, Bruce could not eat in the cafeteria because the noise, lights, and smells provide too much stimuli. He was allowed to eat in a quieter area with a few peers. The ARC decided to desensitize Bruce to the cafeteria by building this into his IEP. At first Bruce started by walking into the cafeteria only to pick up his milk. Each week he would slowly build up time in the cafeteria as he became more comfortable with the environment. By the end of the first semester, Bruce was able to eat full time in the cafeteria with his classmates.

The ARC had to decide whether eating in the cafeteria was appropriate for Bruce because he was extremely sensitive to the stimuli and was not eating well. Each ARC will need to carefully examine all of the different environments a student with sensory problems will be expected to work in and determine if desensitization is necessary. Some examples include the student who could not handle large spaces like the gym, and the student who was afraid of flying insects and therefore would not go on the playground. Both of these students required desensitization plans to help them move into those environments. The team must examine each environment and plan for successful experiences for the student with sensory problems.

Motor skills involving motor planning, poor muscle tone and strength, fine motor skills (e.g., holding or writing with a pencil), spatial skills, or general knowledge of body-in-space may pose problems for students with autism and therefore might be part of the IEP. Sometimes students with autism have difficulties in gym classes, with self care skills, or with paper/pencil assignments because the motor skills required to accomplish the task may have been underestimated or overlooked and therefore no supports were provided for the student. Motor skills should be evaluated and considered in the development of the IEP.

Health care skills such as combing hair or brushing teeth, are areas that may be impacted by core deficits of autism and may need to be addressed on the IEP. Students with autism may have difficulty with these skills in part because the skills involve sensory and motor skills as well as learning to follow an established routine in sequence.

Other Domains

It is important to understand that a student with autism may not have goals and objectives in each of the four domains mentioned above on every IEP. The domains of social competence, communication functioning, cognitive functioning, and physical functioning were highlighted in this section because these domains are typically impacted in students who have autism. In addition, it is important to understand that a student might also have goals and objectives in other domains on the IEP. Every student and each IEP from year to year will be different based upon the unique needs of the student and the learning environment.

Perhaps the most important point in this section is that each student's IEP will be different. While there may be similarities between the IEPs of student with autism, **each IEP will be based upon the unique needs of the student**.

What are some strategies that might address the student's deficit areas?

As part of the ARC meeting when the IEP is developed, the committee discusses specially designed instruction and the participation in the regular education program and agrees upon the strategies and supports that will be provided as environmental resources to allow the student to be successful. Some of these will be provided as services needed to implement a goal or objective. Others will be changes needed to accommodate the student in the regular education program. Specific techniques or strategies that enable the student to engage in learning might also be included. Many students require individualized supports throughout their entire school career and beyond in to post-secondary life. If effective supports are identified early in the studentís life, and passed from grade to grade and in to post secondary life, there is a much greater chance the student will be successful.

The unique characteristics of each student will drive what strategies or techniques are implemented. There is no single perfect technique or strategy for all students with autism. The ARC decisions, which are documented via the IEP help the implementers make individual adjustments to techniques and strategies based upon the content, the environment, and the needs of the student. By making informed decisions and writing an effective IEP that gives guidance on the day to day decisions on techniques and strategies that might best work with a student with autism, the ARC assures student success.

Taking the information from an IEP and translating it into daily instruction requires skill and creativity. The key to successful instruction based upon the specially designed instruction of an IEP is giving the implementers the information necessary to implement the specially designed instruction but not so much specificity that options are not available when needed. For example, the ARC might write that Bruce should have a token reinforcement system, but not what the tokens have to be or precisely how the reinforcement plan should be set up. This allows implementers to choose, use and change tokens based upon environments, and Bruce's changing preferences. The following are two student examples of how IEP information gets translated into daily actions.

Student: Emil

A high school biology teacher required all students to keep notes as he lectured. Emil could not take notes at a fast pace, so he had trouble keeping up with the lecture. The biology teacher presented his concerns during an ARC meeting. During the meeting, Emil and other teachers said that the method he learned by was translating what he heard through written words that he saw on the board. Then the words went into his head where he knew exactly where they were stored. Allowing him to look at the board and not take notes was essential to his learning. The ARC determined that there should be a description of this type of learning strategy written on his IEP in the present level of performance as well as in the specially designed instruction section of the IEP which supports his goals and objectives so that the Emil could be successful in classes where note taking was required. Participation in the regular education program was then revised to reflect that Emil would have study guides and visual advanced organizers for all classes when note taking is required. Once the biology teacher understood that strategy, he was able to provide written information for Emil on a consistent basis and the student was able to succeed in the class.

The support (physical materials) of providing written information for the student to use instead of note taking, as it was documented on the IEP, served as a guide which teachers could use to design instruction and assessment for Emil.

Student: Sarah

Sarah had difficulty in an English class because the requirements for making oral reports caused her so much anxiety that she began to refuse to come to school. The English teacher and Sarah

attended an ARC meeting to discuss the attendance problem. Sarah shared her anxieties about presenting in front of a large group of people. Based upon this information the ARC amended her participation in the regular education program to allow audio or video taped reports or oral reports given to smaller number (1-4) of people for any class that required such reports.

The support (output) of tape recording or one-on-one presentation, as it was documented on the IEP provided a guide by which the teacher could design instruction and assessment.

As the ARC and multidisciplinary team develop and implement the IEP of a student with autism the Autism Competency Model can provide a framework around which instructional strategies can be designed. By using the four areas of concern (Personal Challenges, Environmental Challenges, Personal Resources and Environmental Resources), solutions to potential problems can be generated. Often the answer to a particular problem lies within one of two quadrants of the Protective Factors of the student. For example, Ginny does not use verbal means for communication (which is a personal challenge). Supports can be developed based on Ginnyís protective factors meaning her strengths (e.g., she does point and can draw pictures of what she wants) and the environment (e.g., there is a computer with a voice synthesizer card which can be programmed using pictures). The support for working on Ginnyís communication might be to program the computer and teach her to use the computer to communicate.

Based upon family, peers, and educators experiences there are some general strategies and supports that are effective when working with a student with autism. A brief description of some of these strategies follow. The strategies are organized and related to challenges typically found in the four domain areas impacted by autism: social competence, communication functioning, cognitive functioning, and physical functioning.

Risk Factors and Potential Supports

Using the Autism Competency Model, the personal challenges quadrant indicates what the student may need to understand, process, and follow through with learning experiences. The following section outlines some general supports that may be common for a student with autism. Specific details of implementation for each student have to be discussed and agreed upon by the multidisciplinary team.

Social Competence: Social Interactions, Imaginative Play, Safety Skills

Social interaction challenges are often the ones most difficult to understand and require the most innovation. Even though most schools have not traditionally taught social interaction skills, more are realizing that this area needs to be part of the curriculum. Problems teaching these skills to students with autism are unique. Many students with autism have difficulties with attention and information processing. They have difficulty engaging, shifting, and disengaging attention. They have trouble organizing, storing, and retrieving information. They often retrieve information exactly as they have learned it. Additionally, there are problems with understanding and using language and other means of communication. Thus, acquiring social skills can be very difficult.

The student with autism, like all children, must learn to differentiate self from others and to learn that people have different viewpoints. This knowledge leads to understanding the behaviors of others. Empathizing or understanding the perspective of someone else requires understanding of the internal causes of behavior. Most students learn to understand various emotional states and

make appropriate references to them. Further, they invoke hidden causes to explain the behavior of others and can make a distinction between what others believe and the real situation. They also learn to distinguish between the emotion a person displays and what he may be really feeling. The student with autism may not learn these complex concepts. The student needs direct teaching and many positive experiences with social interactions potentially including advocates, interpreters, and facilitators to maneuver the complexity of social interactions and expectations.

Here are a few examples of how the Autism Competency Model can be used to identify a problem, analyze the risk factors, and identify the protective factors to determine an action or support that would address the problem.

Example 1

Assessment: When someone greets the student he or she does not respond.

What are the studentís Risk Factors?

Personal Challenges
    Has difficulty giving eye contact especially up close
      Has a long and delayed response time
      Attention must be focused ahead of time

Environmental Challenges
      Shies away from people who are loud or move into personal space
      Confused by unstructured settings
      Poor attending due to the unpredictable stimuli
      Problems if person is at a different height

Desired Behavior: Student will respond to a greeting by a familiar person by giving eye contact and a smile

What are the studentís Protective Factors?

Personal Resources
Likes people she knows and who have responded positively to her
Is aware of people coming into the environment

Environmental Resources - *some ideas generated include*
Use structured patterns and consistent cues, (e.g., combines wave or gesture with verbal) Planned reaction if no response, (e.g., repeat, move closer or further away)
Allow response time
Gain attention by saying name
Stay a distance away, but be at eye level
Make interaction meaningful

Analyzing the risk factors and the protective factors generates several strategies that can be implemented in the studentís learning environments.

Example 2

Assessment: The student can make individual choices, but does not understand group decision making.

What are the studentís Risk Factors?

Personal Challenges
> Doesn't realize that someone else has another idea/desire
> Difficulty listening to verbal explanations
> Gets upset when doesn't get his/her way

Environmental Challenges

> People get annoyed by self-centered behavior
> Few experiences with informal interactions with peers
> People rarely give feedback for fear of anger in return, therefore don't express their desires directly

Desired Behavior: The student will use a specific strategy for deciding which activities a small group of people might do.

What are the student's Protective Factors?
Personal Resources
Knows logos letters and some words
Pays attention to visual stimuli
Likes to do activities in the community
Makes concrete choices from several options

Environmental Resources - *some ideas generated:*
Use visuals: pictures, written words, logos of choices
Present choices, put names by each - pare down choices
Start with only two people, slowly adding more
Decide on a strategy for making decisions (e.g., alternating who makes choice, voting, a format for discussing each person's choice)

By considering the risk factors and the protective factors, strategies were generated that can be implemented within the learning environments of the student. The multidisciplinary team might choose to use one or all of the ideas depending upon the stated goal in the studentís IEP.

Using the competency model guides specific questions that can generate ideas for simple or complex solutions. Once the risk factors and protective factors have been explored specific methods or strategies can be implemented. In the following section general ideas for working with social competency are presented.

General Ideas for Social Competency Supports

Teach specific social behaviors.   Such as:

- Visual regard/joint attention/social referencing (impacted by the affective state of the student, stimuli around him/her, repetition of pattern, predictability of pattern, familiarity, response of person, time for response/engagement)

- Extended looking at what others are doing (close proximity required)
- Response to familiar social stimuli (non-verbal, verbal)
- Initiation of positive social contact
- Complimentary behavior with partner
- Imitation/modeling
- Coordination of object play with social behavior
- Elaboration and expansion of actions of partners

Teach complex social skills.   Such as:

- Sharing/turn taking
- Repairing interactional breakdowns
- Inviting
- Negotiating
- Complimenting
- Cooperating in planned activities
- Use of appropriate social conventions in appropriate context
- Responding to signals from partners - waiting for signals to talk, person is finished, person is upset or tired of topic
- Asking for feedback, recruiting praise
- Gaining attention in appropriate ways for the setting
- Responding appropriately to correction or suggestion
- Waiting for others to respond and listening to response
- Responding to teasing (knowing it is teasing)
- Using humor appropriately (knowing what is humorous to someone else)
- Understanding of social conventions associated with various age groups and settings
- Use of polite skills in various settings
- Reciprocal conversation - commenting and asking

Teach group or school behaviors.   Such as:

- Moving within environment - lining up, waiting, being first, hands to self
- When to sit and stand and for how long
- Where to keep belongings and how to organize them
- Transitions - time, moving, where take place, who helps
- Waiting, being on time, finishing - all time bound demands
- Working alone versus working in a group
- Choice versus assignments and directives
- How to apply school rules - recitation is different from application
- Authority figures - operational hierarchy and social expectations

Teach general abstract concepts with concrete methods.   Such as:

- Fairness
- Politeness
- Kindness
- Niceness
- Embarrassment
- Lying/Truth Telling/Tall Tales
- Joking/Teasing
- Rudeness
- Reality vs Pretend vs Making it up vs Lying

- Expression and interpretation of emotions
- Accusations
- Group pressure and collective application of consequence

Apply motivation techniques.   Such as:

- Know and use his/her likes and preferences
- Encourage the student to make choices
- Use context of activities of interest
- Use meaningful and useful activities
- Enter into student's play to gain interaction

Teach and maintain structure and routines.   Such as:

- Keep predictable schedules and routines
- Provide advanced warning when schedule or routine is going to change

Provide opportunities to learn within natural settings.   Such as:

- With the people the student knows and interacts with on a regular basis
- Home, school work place, community

Provide supportive adults to facilitate and model.   Such as:

- Parents or advocates
- Big brothers or sisters
- On site coach

Engage supportive adults in planning and implementation.   Such as:

- Deciding with the team what skills to teach
- Modeling and labeling skills and behaviors
- Developing individualized program plan to teach social skills
- Planning environment and activities
- Providing multiple opportunities to use/rehearse the skill
- Providing reinforcement
- Training other staff regarding the social skills program

Engage supportive peers.   Such as:

- Buddies
- Friends
- Advocates

Teach and support peers (with age-appropriate and positive interaction skills) so they:

- have input and choice;
- are taught persistence and expectations;
- know about specific interests and skills of student with autism;
- receive feedback;
- help problem-solve and organize;

- are reinforced;
- are taught specific strategies for communicating with and understanding the student with autism ;
- are models for positive social interaction;
- cooperate as a group with the student with autism to achieve a goal;
- have regular attendance and time for rehearsal and feedback; or
- earn how to advocate effective.

Use proactive teaching.   Such as:

- Positive reinforcement
- Begin new learning with successful experiences (what the student already knows)
- Menu of reinforcers used consistently and across environments

Provide visual information.   Such as:

- Picture cards telling the sequence of events
- Role modeling behaviors and consequences
- Written explanations of abstract concepts such as emotions
- Concrete objects

Use drill and practice.   Such as:

- Allow student to practice multiple times across multiple environments
- Repeat information using same words, gestures, visuals

Give feedback that teaches.   Such as:

- Use the first you do this ___, then you do this ___ technique
- Tell the student what they did, the consequence, practice it, reinforce

Teach Reciprocal Social Interactions.   Such as:

- Give and take
- Sharing
- Cooperating
- Purposeful conversation
- Greetings
- Asking

Choose Activities, Objects and Toys that:

- Promote social interaction
- Focus attention
- Become predictable, so that the student knows what to expect
- Use high structure - repetition, rule bound
- Promote cooperation and contribution
- Provide lots of visual information
- Use strengths and interests of participantsï with well-defined physical areas
- Define roles
- Encourage communicative exchanges

Provide information using direct teaching.   Such as:

- Time for student to watch, analyze, and interpret in natural settings and with videos
- 1-1 role playing and practice with a peer and/or an adult taking varied roles
- Small group structured activities
- Social games and role playing with familiar group and leader

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Communication Functioning

Expressive and Receptive Language

Expressive and receptive language development are essential to the success of students with autism. There are a wide range of supports that can be used to create learning environments in which the student can engage. In this section common behaviors noted for students with autism are listed on the left hand side of the page. On the right hand side are suggested ideas for actions and supports that may help address the behaviors noted. This list is meant to serve as a sample of ideas to address communication behaviors.

Communication   Ideas for action/support.

Echoes or doesn't respond   Ask fewer questions. Use open
                                    ended sentences.
to questions   Provide models. Be more specific. Make sure
        student   understands.

Doesn't understand   Use visuals with clear, concise
   verbalizing. Model. Point.
                 Gesture. Use pictures. Demonstrate. Use written words.

Has trouble with conversation,   Provide rehearsal, scripts, visuals.
 staying on topic, and back and forth interactions   Talk about topics of interest,
                           then expand.

Doesn't ask for help   Provide an easy way to ask for help
  such as a recorded   message,
                  then systematically identify and practice
     when   to use this means.

 Doesn't use verbal means   Respond to all communicative
 attempts, including   behavioral.
                  Teach an augmentative system
   that   emphasizes a reciprocal
 component. Other people need
                 to understand the system. It should be usable
 and   portable across settings and
                     people.

Behavior	Ideas for Action/Support
Scrambles words or can't get out words at the time	Refrain from correction. Provide calm assurance and a clear model in verbal or written form. they are needed
Always answers yes or uses yes/no indiscriminately or doesn't have a yes/no response of Acknowledge for the moment. Give it power	Limit question asking to things that really matter to the student. Work on a "No" response first because this is crucial to the development acceptable behavior. Use visual forms. and accept a "No", at least and meaning.
Doesn't make choices Start with two opportunities.	Provide visual or concrete choices. choices then build to more. Allow frequent Make sure student knows the meaning of choice.
Perseverates with constant it possibly a questions or comments a perspectives? Analyze Use	Determine purpose of questions. Is request for more information, a display of anxiety, understanding of other's purpose then decide what needs to be taught. visuals.
Talks about one or two favorite topics from your Determine when this whom, to guide further teaching figure with information	Build from these topics. Provide visual or concrete examples of other topics to discuss, perspective and the student's. occurs and with strategies. out other ways to provide the student regarding the means to Don't ignore these attempts to interact, socialize and share with others.

Cognitive Functioning

<u>Repetitive or Stereotyped Behavior, Organizational Skills</u>

Students with autism may need supports to successfully participate in learning environments. Due to the unique way that the student processes information supports requiring organization, routines, concrete learning may be necessary. Listed below are commonly seen behaviors and ideas for supports to address those behaviors.

Cognitive Behavior	Ideas for Action/Support

Delayed response time   Pause. Wait for
response. Provide

      environmental cues.

Sequential learner   Teach in sequential way.
  Provide information

routines,   about the sequence of events,

      activities.

Distracted easily   Provide visuals.

participation.   Encourage active   Lessen

    environmental distraction.   assignments.

Shorten   Provide a person to cue   gestures and other

with   visuals.

Short attention span   Use strengths and

sensory   interests. Consider   needs, where

  much   person is located, how   waiting time is

and   required, motor problems,   amount of auditory

     input. Use more visuals.

Hyperactive   Provide structure and

  time   organization. Provide   to exercise.

   Provide less sitting and more action.

Time problems - understanding   Less pressure on time with
  more emphasis on

activities   passage, hurrying amounts. Sequence   in visual form.

Need to be perfect, no mistakes   Analyze meaning of

to   mistakes. Desensitize   being corrected.

mistakes.   Teach ways to fix   Teach

   acceptance of and how to request help.

Inconsistent skills and behaviors   Use consistent

visual   approaches. Provide   prompts to

Structure   ensure success.   programs,

   routines, environments.

High anxiety level   Provide accurate, prior,
  and understandable

   information and needed assurances

and

and implement

supports. Teach

relaxation

routines

and activities

Difficulty making choices or
input from student, if solving problems

Decide on options with

possible. Present options visually.

Limit

number of

options. Assure that at least

one

option is

desirable. Sequence steps of

options

when needed

to assure reaching a decision.

Physical Functioning

Sensory, Motor, Health

Students with autism will likely have problems in sensory skills and could have problems in motor and health skills. The following list provides some common behaviors if such problems exist and some ideas for supporting the student.

Sensory Behaviors	Action/Support	Ideas for
Sensory defensiveness and with exposure over sensitivity changes	time. Make necessary environmental adaptations.	Careful desensitization and
Need for sensory involvement	sensory needs.	Increase activities to meet
Motor planning problems of	activities requiring use objects and action.	Involve student in three dimensional
Find to lower paper/pencil get models,	requirements. Give information or computers, stamps, functional activities.	alternative ways responses from real and
Restricted participation time to an increasing		Planned exposure over

and expanding number of activities,

bridging

from those of

partial

current interest. Allow for

participation.

for

Student may need to watch

awhile.

Orientation of self in space

Define boundaries

specifically,

concretely and

provide

new

support and information about

places and

setting.

activities in the natural

Teach where

to stand and walk. Practice often.

Fears and Frustrations

Desensitize. Practice.

concrete

Provide clear,

information

Write

for rehearsal in visual form.

social stories of

give

specific situations to

accurate

of

information and perspectives

others.

Plays with one or two toys

Slowly introduce new toys.

Determine what the

find

student likes about a particular toy and

other toys similar

to this but with added

features. Use peers to model the use of the

toy.

Use pictures to

introduce the toy. Allow

time

for

desensitization.

Limited interests

Determine current

interests, slowly

introduce

Develop plans for

new interests.

desensitization.

Give

information through pictures or other

visual

means. Use

schedule or timer to tell when

and

how long activity will

occur. Use student's

strengths to ensure success on first trial.

Make

sure the activity is

successful from the

student's

perspective.

Section Four Behavior and Discipline Issues

Most students with autism want to behave appropriately and follow the rules, but have a great deal of trouble applying their rote memory of rules to real situations, especially when they are anxious, impulsive, or confused. Students with autism have trouble understanding how to apply school and social rules even though some students with verbal language and good memory may be able to recite the very rules they seem to break. In some cases these students may correct others who break the rules - at least the rules that are very specific and concrete. Because of this variability in understanding rules and actual performance of appropriate behaviors educators, family, and peers often are unsure about the area of discipline as it applies to students with autism. Typical questions related to behavior and discipline for students with autism include:

- How do you develop appropriate behaviors for students with autism?

- What do we do when a student with autism engages in inappropriate behaviors?

- Are the standards of discipline applied to students who are not disabled also applied to a student with autism?

Section Four answers these questions using the competency model as a framework for planning behavior and discipline strategies.

How do you develop appropriate behaviors for students with Autism?

It is the responsibility of the Admissions and Release Committee (ARC) to determine the specific goals, objectives, and specially designed instruction related to behavior that will enable the student with autism to be successful in learning environments. The decisions concerning behavior development will be reflected on the student's Individualized Education Program (IEP). The ARC and the multidisciplinary team determine which strategies will support the development of appropriate behaviors based upon the goals. Understanding autism is imperative to providing the supports necessary for a student to be successful at home, school, work and in the community. Each student with autism will have unique needs in relationship to behavior and discipline. However, there are likely to be similarities in the types of problems. One way to get started developing or improving student behavior is to plan ahead for every student to understand behaviors, expectations and rules. Some students will catch on to the expectations and rules while others will need time and practice to get their behavior skills aligned with expectations and rules. The best place to begin in developing appropriate behaviors is with a plan.

Behavior Plan Key Idea: Use a PROACTIVE approach.

Using a proactive approach means setting the stage for all students to be successful. It requires building an environment where the students learn the right behaviors before they have a chance to ever get them wrong. The proactive approach means <u>teaching</u> the students the precise behaviors expected for each rule. For example:

> *Every year Mrs. Wolf starts the first day of school teaching the students certain rules. One rule she teaches is: sit in your seat. She demonstrates for the students what she means by ìin your seatî. She explains that ìsit in your seatî has three parts: 1. feet flat on the ground, 2. back against the back of the chair, and 3. hands on top of the desk. She lets each student practice the three steps and reinforces them for every step. Mrs. Wolf also provides a picture sequence of the three steps for each student. Some students tape the pictures on to their desk to remind them of the three steps. Because she puts the behavior into three*

steps she can reinforce a student if they have at least one of the three behaviors happening and then guide them to completing all three steps.

To create a proactive approach to behavior development consider these steps.

1. **Determine the specific rules that must be in place for learning to occur**.

Classrooms teachers will need to identify what basic rules must absolutely be part of the expectations in the room for learning to occur. For example: One teacher lists out five specific expectations or rules she always has in place in her room: 1. Keep your hands, feet, and materials within your personal space. 2. One person talks at a time. 3. Use a quiet, or three inch voice when talking with partners. 4. Listen to the teacher (or who ever is speaking to the class). 5. Use the polite words (e.g., please, thank you, may I). To help Bruce understand those rules the classroom teachers provides pictures of each rule for the class and particularly for Bruce. In addition, the teacher teaches each rule and helps the students practice each rule.

Family members will need to identify what basic rules must be in effect at home to meet expectations. For example, Bruce's family has three general rules: 1. Get along with others 2. Do your job without being asked. 3. Clean your room. While these rules might be clear to the other children in the family, Bruce will likely need a more functional definition of what the rules mean for him. The family has further defined, in more specific terms what these rules mean for Bruce. For example, Bruce learned that rule number 1 means no hitting or taking toys, rule number 2 means taking out the trash bag after dinner each night, and rule number 3 means putting every toy into his blue toy box before bed.

A list of potential questions to ask for determining essential behaviors includes:

- What behaviors are absolutely essential for the student's safety and for the safety of others? (e.g., stay within boundaries, walk beside someone, hold someone's hand, keep inedibles out of the mouth)

- What behaviors are essential to the well being of others? (e.g., use words or gestures rather than yelling, hitting, or kicking)

- What behaviors are needed to be successful with peers? (e.g., attend to things that other students attend to, awareness of others, be near others, sit with others, play with others, communicate with others)

- What behaviors are needed to take part in school activities? (e.g., walk in a line, organize belongings, take turns, ask for help, tolerate noises, make changes)

- What behaviors will help the student continue to learn? (e.g., attend to certain activities and things, be toilet trained, use instruments, work independently, finish work)

- What behaviors will build self esteem in the student? (e.g., paint a picture, climb and go down a slide, help, pass out the snacks, learn something that is exciting, be in a play, get all the spelling words right)

2. **Understand the student in relationship to his or her unique qualities (strengths and weaknesses)**.

Once specific behaviors or expectations have been determined it is important to analyze the student(s) strengths and potential problems that may interfere with their ability to meet the expectation. Knowing potential problem areas gives guidance toward how the expectations should be taught. In the case of a student with autism, use the competency model to outline the personal and environmental challenges along with the personal resources and environmental resources. The information collected using the model will serve as a guide to understanding student behaviors. Once the specific expectations and the capabilities of the student are known decisions can be made concerning what must be taught and how it should be taught.

Students with autism face certain **Risk Factors** which, if unaddressed, can pose problems related to behavior and discipline. The first risk factor to assess is **personal challenges**. For students with autism appropriate behavior may be impeded by problems:

- understanding social interactions patterns; perspective, motives, and thinking of others; perspective taking and inappropriate or misinterpreted behaviors
- learning sequentially
- understanding language, especially abstract language, long sentences, and questions
- expressing basic wants, needs, and feelings (especially when put on the spot)
- understanding the passage of time or thinking through future events without support and rehearsal
- processing and integrating problems that may make multi-sensory environments difficult and stressful
- taking longer than their peers to process, organize, and retrieve information
- developing inconsistently within and across domain and skill areas
- applying learning across settings and people
- using motor planning or other motor problems
- paying attention; may not shift attention, engage attention, or disengage attention easily
- becoming anxious and upset when they do not understand a situation or feel they are not succeeding
- taking a rule stated in the negative and knowing what to do

Certain **environmental challenges**, if not addressed, can pose problems for students with autism. These challenges include:

- People who misunderstand the student's challenges

- Inconsistency.

  (e.g., different rules and approaches from day to day, place to place, person to person; abstract, non specified rules that are not applied across teachers and settings)

- Confusing, disorganized environments.

  (e.g., too much movement, clutter, loud music, noise, and chaos)

- Punitive approaches to behavior management.

  (e.g., abstract connections between negative punishment and student behavior; consequences that heighten the inappropriate or other behavior)

- Abstract guidelines for behavior.

- Negative rules.

  (e.g., rules that state what not to do instead of what the student should do like: ìDo not get out of your seat.î)

Once the personal and environmental challenges that may interfere with a studentís appropriate behavior are identified, it is important to look at the **Protective Factors** (personal resources and environmental resources) for developing and sustaining positive behaviors.

Personal resources are one part of the key to developing positive behaviors in students with autism. Educators, family, and peers must be aware of what the student knows, likes, and can do that will set the foundation for appropriate behaviors. A few simple steps for identifying and building personal resources follow.

- Identify, develop, and expand the student's strengths, interests and preferences.
- Start with the skills the student has and gradually build their behavior repertoire.
- Take time to help student adjust to new situations and activities.
- Encourage students to engage in activities that peers are doing and that the family does with individualized expectations and supports.

Not only is it important to understand and build upon a studentís personal resources it is equally important to develop the environmental resources that will support the student in developing and using positive behaviors.

Environmental Resources provide the second part of the key to developing positive behaviors for students with autism. Once the potential problems are identified and the potential strengths of the student are determined attention can turn to the environment. At this point it is important to determine what can be changed within the environment to support student learning. Questions to ask include:

- What in this environment is making this behavior or rule so difficult to follow?
- Are there any unexpected triggers (e.g., noise, smells) within the environment?
- Does the environment consistently require this behavior or is there inconsistency in expectations?
- What supports need to be in place to create success (e.g., time, pace, size, participation, difficulty, materials)?
- What are the least intrusive supports (easiest to implement) that will produce success? (e.g., put pictures of the behavior on the student's desk and provide menu of reinforcers for appropriate behaviors)
- What are the more intrusive supports that may be needed to produce success? (e.g., new and complex behavior management system)

3. **Develop a plan to teach positive behavior**.

It is important when preparing to teach a new expectation that the specific behavior is clear, concise and stated in a positive way. In addition to the clarity of the behavior or expectation it is important the plan to teach the behavior a variety of ways to learn the behavior. For example, some students will learn best by watching another student or teacher model the behavior, others may learn best by practicing the behavior, still others might learn best when the expectation is written or drawn with specific steps. If a behavior or expectation has abstract implications the plan must include teaching the behavior from concrete to abstract. Many students will not immediately

understand abstract concepts and may need multiple practice sessions before the behavior expectation is understood. Any plan to teach a new or desired behavior should include these steps:

1. Identify the appropriate behavior.

2. Teach the behavior using methods that match the student's learning style and needs:
   Allow time to watch. Encourage the student to be near and observe.
   Desensitize the student.
   Make sure the student knows and sees the sequence.
   Make sure the student knows the exact meaning of what you say.
   Provide pictures/words/objects to make messages clear.
   Use modeling.
   Use visuals.
   Teach the sequences and contingencies.

3. Teach the cues for the behavior (e.g., when the teacher raises her hand with the palm out it means   to be silent/stop talking).

4. Practice the behavior (e.g., let students demonstrate for, or critique each other).
   Allow time to get used to a situation through repeated trials and short exposure.

5. Reinforce the behavior (e.g., provide verbal praise, award points).
   Use student's strengths and interests and build from these.
   Use sensory experiences with young children
   Do something that is new, then do something that is already fun and a strength and interest.
   Use classroom-wide reinforcement plans.

6. Practice and reinforce the behavior across multiple settings
   For example:

   Learn to eat with a spoon while eating a favorite food like ice cream.
   Dictate a report or speech into a tape recorder.
   Use a computer to do spelling or to write a report.
   Be a messenger to learn to walk in the halls.
   Be a helper to put away gym materials to help desensitize student to the gym.
   Design an individual contract with the student in visual form.
   Be specific and concrete about expectations and reinforcers.

4. **Create a consistent, predictable, organized environment**.

Once the behaviors have been taught, practiced and reinforced across multiple settings it is essential the the learning environment keep the expectations of behavior consistent. When a learning environment is organized and predictable students will be better able to follow specific rules and understand the expectations within that environment. Consistency and predictability are essential for students with autism to learn and succeed in any environment.

5. **Keep ongoing data related to behaviors.**

Data collection is important for two reasons. (1) When specific behavior goals are written on an IEP the implementers are responsible for collecting data about when and how often behaviors are occurring. Keeping specific data allows the multidisciplinary team to evaluate the student's progress objectively. Information on the student's progress allows the team and the ARC to make decisions for continuing or changing the goals of the student's IEP. (2) Data collection provides a view of the actual behaviors and progress the student makes on a daily and weekly basis. The data collected can provide the multidisciplinary team the information necessary to provide appropriate supports for the student to be successful in daily learning.

What should we do when a student with autism engages in inappropriate behavior?

The course of action to take when any student engages in inappropriate behavior depends upon the severity of the behavior. If the behavior threatens the physical well being of the student, other students, or adults (e.g., stabbing with a scissors) it may be necessary to intervene immediately to stop or prevent injury. If the behavior is not threatening (e.g., getting out of seat, taking others toys) there are several options for action.

When a student with autism engages in an inappropriate behavior it is important to understand the purpose of the behavior. **Refrain from getting into power struggles with the student.** The student with autism often seems to be irretractable when engaged in unacceptable behaviors. Using the Competency Model can assist the team in understanding the behavior. Personal and environmental challenges can have a big impact on student behavior. The behavior should be analyzed to determine possible personal challenges and environmental challenges contributing to the behavior.

1. **Determine the appropriate behavior.** Ask questions such as:

   What behaviors are absolutely essential for the student's safety and for the safety of others? (e.g., stay within boundaries, walk beside someone, hold someone's hand, keep inedibles out of the mouth)

   What behaviors are essential to the well being of others? (e.g., use words or gestures rather than yelling, hitting, or kicking)

   What behaviors are needed to be successful with peers? (e.g., attend to things that other students attend to, awareness of others, be near others, sit with others, play with others, communicate with others)

   What behaviors are needed to take part in school activities? (e.g., ride a bus, walk in a line, organize belongings, work quietly at times, take turns, ask for help, tolerate noises, make changes)

   What behaviors will help the student keep learning? (e.g., attend to certain activities and things, be toilet trained, use instruments, work independently, finish work)

What behaviors will build self esteem in the student? (e.g., paint a picture, climb and go down a slide, help, pass out the snacks, learn something that is exciting, be in a play, get all the spelling words right)

2. Analyze the purpose of inappropriate behavior.

Try to figure out what the behavior means from the student's point of view. This is not easy because individuals with autism learn and view the world differently. Ask questions related to the risk factors and protective factors of the student. Here are just a few of the questions to ask:

- Is the student missing information that would enable them to perform the behavior?
- Has this behavior been taught in a concrete, sequential manner?
- Has the student practiced the appropriate behavior with success in this environment?
- Has the behavior been practiced in a variety of settings?
- What are other students doing when this behavior occurs?

Sometimes the answer lies between the students challenges and the environment. One strategy to use when a new inappropriate behavior emerges is the **ABCs of behavior management**. The ABC method requires that the student is observed in the environment where the behavior has been occurring.

Three elements of the behavior are analyzed:

A = antecedent - what happens just before the behavior occurs?
B = behavior - what is the exact behavior of the student?
C = consequence - what happens just after the behavior?

For example:

Bobby is making noise that bothers the student with autism. Jamal (the student with autism) wants to ask him to stop, but doesn't know how other than to hit Bobby. Bobby complains to the teacher and then Jamal gets punished - made to sit alone.

The <u>antecedent</u> is: *Bobby making noise.*
The <u>behavior</u> is: *Jamal hits Bobby*
The <u>consequence</u> is: *Jamal gets punished**
    (which inadvertently rewards the student because it removes him from the noise!)
Potential <u>long term consequence</u>: *student learns that hitting the peer gets him removed from annoying noise.*

It is important to understand that many behaviors are forms of communication. If educators, family, and peers can determine the antecedent, the behavior - or intended message, and the common consequence, specific plans can be developed to teach the student the appropriate behavior when the antecedent happens again. Sometimes the antecedent is not easy to identify (e.g., student reacts to a certain smell or sound which is undetected by the observer). In the case of the example with Bobby and Jamal, the teachers identified the antecedent. Knowing the antecedent, the teachers could design a plan to teach Jamal the specific behavior of asking Bobby to stop making the noise (replacing the hitting behavior) and later teach the behavior in relationship to other students who make noise.

Most behaviors can be analyzed using the ABC technique. However, given the characteristics of autism there may be some behaviors that might be considered inappropriate, but do not readily fit into the ABC method of analysis. Such behaviors should be analyzed in relation to the studentís perspective. Knowing the studentís perspective or message of the behavior will help define what the student needs to know and be able to do for positive behavior. For example:

- Student refuses to enter the auditorium.

Possible reasons: The student is sensitive to noise, crowds, being closed in, or new situations. The student doesn't understand the change or associates the auditorium with a bad/frightening experience.

- Student with autism stays on the edge of groups, not joining in.

Possible reasons: The student has trouble initiating, especially with groups of people and is not comfortable with the changing interaction patterns.

3. Teach the appropriate replacement behavior.

It is important, when attempting to stop an inappropriate behavior that students are also taught the replacement behavior. Most students will continue to demonstrate inappropriate behaviors unless taught the appropriate behavior to replace the inappropriate one. It is important to teach the student self-monitoring strategies and to help diffuse situations so that learning can take place. Students with autism need to learn relaxation routines, to ask to be alone, have their mentors and advocates identified, and need help to access the supports that work. There are some steps to keep in mind as a replacement behavior is taught.

- **Get the student's attention.**
-

Use the student's name and be in close proximity.
Be at the student's eye level.
State the rule or the direction positively.
Use gestures, visuals, and modeling if needed.
- **Show and tell the student what TO DO.**
-

Use gestures, objects, pictures, and demonstrations to direct and redirect the student.
Change the focus of attention to the correct behavior.
Examples:
Use "Judy, stop, Give that to me." instead of "Don't put that in your mouth."
Put your hand out as a gesture and be in close proximity.
"No, we can't go outside now," is better stated, "Joe, lunch, then outside," or "It's raining, go outside tomorrow, Let's do ___."

- **Give the student time to respond.**
-

Pause and wait, before you repeat the direction or add gestures.
Be close so you can assure that the direction is followed.

- **Be consistent and make the environment predictable.**

-
     Apply the rule at all times in the same way.
      Give accurate information ahead of time in a way that the student understands.

- **Avoid asking series of questions, long questions, or "why" questions.**
-
     Use open ended sentences for a student to complete as a way to provide information

     Depending upon the behavior other considerations include:

- **Establish places to do certain activities. Provide the student a place to:**
  - be alone
  - sit that is comfortable and establishes boundaries
  - relax such as a beanbag chair or rocker
  - run within boundaries
  - do certain sensory activities

- **Provide objects that comfort and relax the student.**

- **Provide places to keep belongings for organization.**
  - Readily accessible without too much stimuli.

- **Establish boundaries.**
  - Use visuals (e.g., a rug on the floor, an immovable object, or a fence).
  - Walk the boundaries and redirect several times a day until the student learns, reinforce the student for staying within boundaries.

- **Desensitize the student to environments that cannot be changed.**
  - Over a period of time
  - When there is time to watch, visit for short periods
  - Consider times when there are fewer people and less waiting time

- **Consider ways to help a student be comfortable within strange environments such as having familiar objects with him.**

- **Inform student about routines, changes, activities, social exchanges, where you are going, and information about the world around him.**

4. **Reinforce the student.**
     For approximations
     Using items, events that are pleasing
     Consistently until the replacement behavior is solid across multiple settings

Specific Behaviors of Concern

There are three specific behaviors sometimes demonstrated by students with autism that are of concern in any learning environment: aggression, noncompliance, and tantrums. Each of these behaviors can be analyzed using the Autism Competency Model. However, it is important to understand that the reason or purpose for the behavior will be different for each student due to the uniqueness of risk factors and protective factors.

Aggression (e.g., hitting, kicking, biting, and shoving)

Aggression is of major concern to everyone. In society a person who is aggressive is at risk of being labeled as noncompliant, may be misunderstood, and even incarcerated. Aggression towards others is not permissible. However the aggressive behavior of a student with autism must be analyzed and the meaning of the behavior hypothesized from the student's perspective. Ask: "Why did the student use this behavior?", "What message is the student trying to convey?", and "Why did he use this behavior to convey the message?"

Sometimes a student has used various methods in an attempt to have people understand that he did not like something, wanted someone to move, or someone took something from him. In this case the aggression was used as his <u>last</u> resort. At other times, aggression is the first and only means the student uses to convey a message.

Using the competency model ask:

- **What are the primary challenges for this student that hinder development of more appropriate means to have his messages understood?**
  Does the student have sensory problems that are beyond tolerance level?
  Does the student need to finish something and becomes upset if interrupted?
  Does the student have the means to communicate wants and needs so everyone understands?
  Do the people in the environment respond to the appropriate means of communication?
  Are there positive interaction patterns established with the student and peers?
  Are there activities the student can do with others?
  Are there lots of negative messages delivered to this student?
  Can this student entertain himself or herself?
  Can the student defend himself or herself?
  Does the student see others engage in this type of behavior?
  Are there clear expectations and consistency in application?
  Are there health problems?

- **What is the replacement behavior this student needs to learn rather than engaging in this behavior?**
  To ask someone to stop or move?
  To ask someone for help?
  To tell someone "No"?
  To learn what activities and rules are negotiable and which are not?
  To learn to wait?
  To learn to take turns?
  To learn when some things aren't possible?
  To accept changes with accurate prior information?
  To accept the answer of others?
  To tell someone he does not feel well?

- **How can the student be taught new behaviors?**
  Decide on the exact words and cues that will be used to teach the student.
  Provide multiple opportunities to model the new behavior.
  Reinforce the student for using the more appropriate behavior.
  Respond and react positively to the new behavior.
- **What to do when the behavior occurs?**
  Set a plan that everyone uses when the behavior occurs.

Avoid giving the behavior too much attention.

Show what behavior is appropriate.

Noncompliance

Noncompliance is defined as when a student does something he knows he should not do or refuses to do something that someone wants him to do. This is a behavior that is very difficult and annoying. However, it is often part of the student's attempt to exert independence and gain control. Adults need to avoid battles by making the "rules" absolutely clear. It should be clear to the student which rules are negotiable and which rules are not negotiable. To do this educators, family, and peers must be sure of these rules themselves. Consistency in applying the rules is vital. When new rules and expectations are imposed, the student must be taught, desensitized, and rehearsed when necessary. Accurate, prior information that is understandable must be provided.

To understand the noncompliance behavior and determine the appropriate replacement behavior ask:

- **What is the purpose of the behavior from the student's perspective?**
    Does the student know the rules or do rules change depending on the person and the situation? Is there really   consistency?
    Can the student do what is being asked ? What will help?
    Is the student using this behavior as a way to interact?
    Does the student have choice and control over parts of the day at school?
    Is the student reinforced for following rules and doing as someone wants him to do?
    Does behaving get attention and what the student needs or is behaving overlooked and expected?
    Are there sensory issues involved?
    Does the student know and feel comfortable about what is going to happen next?

- **What puts the student at risk for being able to learn appropriate behaviors?**
    Not understanding interactions and being successful with them?
    Not being able to communicate his wants and needs well?
    Not being understood and listened to?
    A small repertoire of activities and interests?
    Sensory issues?
    Learning and attention problems?
    Anxiety and fears?

- **What does the student need to learn instead of engaging in this behavior?**
    To get attention in a more direct way?
    To learn and practice the rules in a consistent way?
    To communicate his wants and needs directly - to have choices?
    To have more interesting things to do?
    To learn to wait?
    To learn to follow a visual sequence and predict what is coming next?
    To have more activities and interests to be redirected or directed to do?

- **What to do when the student engages in the behaviors?**
    Follow a set plan with well established procedures.

    When a student refuses, a set format can be put in place. (e.g., Move closer, say student's name, keep voice calm   and direct, repeat direction then pause. Do this one more time, but add, "I'll count to 3, then I'll help you."   Count at a set pace, using numbers that are visual, then help.

    Make sure the student knows the rule by practicing the rule several times.

Tantrums

Tantrums are behaviors that can disrupt the flow of learning and simple procedures such as moving through a lunch line. Typically tantrums are used by students to refuse a request, a person or an item. For example a student may throw a tantrum when asked to work with a student he or she does not like. Tantrums, like other behaviors are messages from the student. As with aggression and noncompliance, tantrums can be analyzed using the competency model by asking:

- **What does the behavior mean from the student's point of view?**
    Why is the student refusing?
    Is the student afraid, overwhelmed, or overstimulated?
    Is the pace too fast for the student or too slow?
    Are there too many demands?
    Are there sensory issues? Is the student tired or sick?
    Is the student lacking the necessary skills?
    Does the student have more appropriate means to refuse and are they "allowed" and responded to? Is the student   responding to refusal?

- **What does the student need to learn?**
    A more appropriate way to refuse.
    Will "NO" from the student be acknowledged or does the student need to use stronger behavior to get a point across?
    Will an appropriate way to refuse be acknowledged and honored?
    Consider how to make refused activities more acceptable and motivating.
    Which activities are choices and which are not? Is this clear?
    Can the student make choices and are there opportunities for choice?
    What is the value or motivation to comply?
    Are there too many rules?
    Are the rules clear and appropriate?

Other Possible Reasons For Problem Behaviors

Health Issues

Since many students with autism are not able to accurately convey that they are not feeling well this factor must always be considered. Constipation, toothaches, headaches, colds and flu, earaches, seizures, ulcers, allergies, appendicitis, and other conditions must be investigated and ruled out. This is especially true if there is a sudden change in the student's behavior or there doesn't appear to be any logical message behind the behavior. Sometimes students use having a

stomach ache or not feeling well as an escape. They have learned that this is an acceptable way to get help from anxious situations. If this appears to be the case, analyze the source of the anxiety carefully to address the support needed.

General Everyday Issues

Being tired, hungry, needing to be hugged, or to be alone can also cause problems for a student who can not initiate or negotiate well and does not do well with the interaction patterns.

Sensory Issues

Most students with autism have reactions to sensory stimuli that are different from other people. Their reactions may vary from time to time. They may tune in to some things that the rest of us do not. They may need to explore their environments in various ways. They may have some problems knowing how their bodies relate to the environment or may need to move more. Whatever it is, they often are not able to advocate for this need directly so it is important to pay attention to their reactions.

Are the same standards of discipline that are applied to students who are not disabled applied to a student with autism?

The Admissions and Release Committee determines, on an individual basis, if a student with a disability will follow the schoolís standard discipline codes. If the ARC determines that the student will not follow the standard discipline codes a unique set of discipline codes are developed and this is noted on the IEP and within the conference summary report. The ARC describes precisely what discipline codes the student will be held accountable for while in school.

Given the nature of autism it is likely that some students will have discipline codes that vary from the schoolís code to some degree. However, it is important to understand that the decision of discipline is made by the ARC on an **individual basis** for each student. There is no alternate discipline code that works for every student with autism. Just like every other aspect of the studentís learning environment discipline will be unique and based upon the strengths and needs of the student.

Summary

Each student with autism is unique, and as the student grows up there will be unique challenges. Teaching appropriate behavior is vital to the person's quality of life. However, the uniqueness of each student requires people to accept some behaviors that may seem a bit "odd" at times. The student may have unique ways to calm down and keep anxiety levels in check. The student may engage in these behaviors without regard to who is around or location. This case would require teaching the student where to engage in the behaviors, how not to be quite so conspicuous while engaging in the behaviors, or to teach a more acceptable behavior to accomplish the same purpose. The need for and the purpose of the behavior should be accepted and acknowledged.

Tolerance of differences and acceptance of behaviors that are unique should be fostered. A student with autism is often corrected so much that the world seems rigid and intolerable. Channeling behaviors, accounting for special needs, and fostering strengths and interests while building skills and successful experiences are the cornerstone of helping the student grow and learn successfully. Emphasis on cooperative, rather than competitive activities and cherishing the strengths of each student will build a "community of learners" who help one another.

As a team parents, educators, and peers hope to broaden the student's world and people's understanding of autism. The more people who understand autism the better the supports will be which will help appropriate behaviors and the student flourish.

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Autism Society of America Chapters Autism Society of America 7910 Woodmont Avenue, Suite 650 Bethesda, MD 20814 1-800-AUTISM

Information packets are available on general autism and educational issues. Membership is $20.00 per individual and $30.00 per family which includes copies of the ADVOCATE, the ADA newsletter six times a year, and lower conference fees. ADA also has lobbyists in Washington.

In Kentucky there are local chapters and support groups.

1. Parents and Caregivers of Autism
    Rt. 3 Box 381
    Louisa, KY 41230
2. Autism Society of the Bluegrass
    Contact Virginia Moody
    688 Longwood Road
    Lexington, KY 40503
    606-233-3623
    or Directions Disabilities Link of Red Cross 606-276-3027
    Autism Society of Kentuckiana (Louisville and Southern Indiana)

    Contact Laurie Spezzano
    5007 South Highway 53
    Crestwood, KY 40014
    502-222-4706
    * meet second Saturday of the month, 10 - 12 at Thomas Jefferson
    Unitarian Church 4938 Old Brownsboro Road, Louisville, KY
3. Southern Kentucky Parent Group
    Contact Angela Boyd
    104 Tate Page Hall
    Western Kentucky University

Bowling Green, KY 42101
502-745-3818

4. Heartland Support Group (Hardin County and surrounding areas)
   Contact Stephanie Thomas
   111 Fiddlers Ridge
   Vine Grove, KY 40175
   * meet fourth Tuesday, 630 - 800 at Stovall United Methodist Church
   Purchase Area Chapter of the Autism Society of America

   Contact Susan Byram
   144 Valley Road
   Paducah, KY 42001
   502-442-6126
   Western Kentucky Chapter of the Autism Society of America

5.
   P.O. Box 1647
   Henderson, KY 42420
   Resource Library - Nancy Boyett 502-827-5805

6. Autism Society of Northern Kentucky

7.
   Contact Sharri Buckley
   502-282-7082

Some Autism Newsletters and Journals

<u>Autism Research Review International</u>
Autism Research Institute
4182 Adams Avenue
San Diego, CA 92116
($16.00 per year)

<u>MAAP (More Able Autistic People)</u>
MAAP Service, Inc.
P.O. Box 524
Crown Point, IN 56307
($20.00 per year)

<u>Journal of Autism and Developmental Disabilities</u>
Plenum Publishing Corporation
Attn. Subscriptions
233 Spring Street
New York, NY 10013
($57.00 per year)

Autism Society of Indiana Quarterly Update
P.O. Box 6174
Terre Haute, IN 47802
($5.00 per year)

Indiana Resource Center for Autism (has materials list)
ISDD
2853 East Tenth Street
Bloomington, IN 47408

Autism Society of North Carolina (ASNC)
Attn Book Order
3300 Woman's Club Drive
Raleigh, NC 27612-4811

Autism Societies of North Carolina and Michigan maintain bookstores. However, titles can be obtained at the library through interlibrary loan or ordered by local bookstores with no cost for shipping. Local libraries are likely to have the books on autism or be able to retrieve them for you through interlibrary loan. A Few Recommended 1990's

Books on Autism

Brill, M. T. (1994). Keys to Parenting the Child with Autism. Hauppauge, NY Barron's.

Dalrymple, N. J. & Ruble, L. A. (1996). Technical Assistance Manual for Kentucky Schools - 1st Draft. Frankfort, KY Kentucky Department of Education.

Fullerton, A. et. al. (1996). Higher Functioning Adolescents and Young Adults with Autism A teacher's guide. Austin, TX. Pro-ed, Inc.

Greenspan, S. L. (1995). The Challenging Child. New York Addison-Wesley Publishing Company.

Guralnick, I. I. (ed.) (1997). The effectiveness of early intervention. Baltimore, MD Paul H. Brookes Publishing Company.

Hodgen, L. A. (1995). Visual Strategies for Improving Communication, V. 1 Practical Supports for School and Home. Troy, MI Quirk Roberts Publishing.

Koegel, R. L. & Koegel, L.K. (1995). Teaching Children with Autism. Baltimore, MD Woodbine House.

Maurice, C. (Ed.) (1996). Behavioral Intervention for Young Children with Autism. Austin, TX Pro-ed, Inc.

Powers, M. D. (1994). Educating Children with Autism. Rockville, MD Woodbine House.

Quill, K. A. (1995). Teaching Children with Autism Strategies to Enhance Communication and Socialization. Albany, NY Delmar Publishing, Inc.

Schopler, E. (Ed.) (1995). Parent Survival Manual. New York, NY Plenum Press.

Schopler, E., Bourgonidien, M. V. & Bristol, M. (Eds.) (1993). Preschool Issues in Autism. New York, NY Plenum Press.

Siegel, B. (1996). The World of the Autistic Child. New York, NY Oxford University Press, Inc.